**NOAA and EPA Preliminary Decisions on Information Submitted by Oregon to Meet Coastal Nonpoint Program Conditions of Approval**

## I. BOUNDARY

**CONDITION:** Within one year, the Oregon Department of Land Conservation and Development (DLCD), Oregon Department of Environmental Quality (DEQ), U.S EPA, NOAA, and other relevant State, local, and federal agencies will participate in a cooperative process to review relevant information and determine an appropriate 6217 management area boundary consistent with established national guidance for the 6217 program.

**FINDING:** Oregon has satisfied this condition.

**DETERMINATION:** The 6217 management area for the State of Oregon will be the existing coastal zone with the addition of the inland portions of the Rogue and Umpqua Basins, in their entirety. The inland boundary of the management area intersects the Columbia River at the westward end of Puget Island.

**RATIONALE:** The boundary of the 6217 management area on the Columbia River is near Washington's 6217 boundary. The inland boundary of Washington's management area intersects the Columbia River at the eastern border of WRIA 25, just east of the Wahkiakum County border.

The Columbia River Basin is a huge, multi-state and multi-national drainage basin covering 233,000 square miles; three states and Canada contribute to the water quality of the lower Columbia River. In Washington, 91% of the portion of the Columbia River watershed within the State is located above Bonneville Dam. In Oregon, 98% of that portion of the watershed within the State is located above the "coastal watershed". In both states, 90% of all of the agricultural indicators of nonpoint source pollution examined by NOAA in making its boundary recommendation are located above the coastal watershed. Similarly, in both states, 70% or more of the population of the Columbia watershed resides above the coastal watershed. These figures show that a large number of nonpoint sources are spread out over a very large watershed, and that only a small part of the watershed is included in either the coastal zone or the coastal watershed of either state. These factors make it extremely difficult to determine whether the relatively small portion of polluted runoff generated within the coastal watershed but outside of the states' coastal management boundaries has a significant impact on the coastal waters of the states. Therefore, based on these complicating factors and the March 16, 1995 Flexibility for State Coastal Nonpoint Programs guidance, NOAA and EPA will defer to Oregon's and Washington's statement that the appropriate 6217 boundary is westward of Puget Island and the eastern border of WRIA 25, respectively.

NOAA and EPA recognize that there are other tools that are currently in use or being developed to address nonpoint source pollution outside of the 6217 management area boundary, such as the development of TMDLs for 303(d) listed waters and phase II of the NPDES stormwater permits. However, NOAA and EPA remain concerned that sources outside the management area boundary could contribute to water impairment in the lower Columbia River. Therefore, we expect Oregon and Washington to use all applicable programs to control nonpoint source pollution beyond the 6217 management area in the Lower Columbia coastal watersheds, to monitor water quality, and, if necessary, to take additional steps in the future to address those sources that have a significant impact on coastal water quality.

## II. AGRICULTURAL MANAGEMENT MEASURES

### A. CONFINED ANIMAL FACILITIES (Large and Small Units)

**CONDITION:** Within two years, Oregon will include in its program management measures in conformity with the 6217 (g) guidance for facilities where animals are confined for less than four months and that do not have prepared surfaces or waste water control facilities. Also within two years, Oregon will provide a strategy (in accordance with section XII, pages 19-20) for use of the State's water quality law (ORS 468B) as a back-up enforceable mechanism to ensure implementation of the management measures for confined animal facilities as proposed on pages 48-50 of the State's program submittal.

**FINDING:** Oregon has satisfied this condition.

**RATIONALE:** The Oregon Legislature adopted House Bill (HB) 2156 in 2001, amending ORS 468B to define confined animal feeding operations according to rules established by DEQ and ODA and to require that the definition distinguish between various categories of operations, including those regulated by NPDES permits. The new definition removes the exclusion for CAFOs where animals are confined for less than four months and that do not have prepared surfaces or waste water facilities. OAR 603-074 establishes rules for administering the CAFO program, including enforcement against water quality violations. Since 1999, ODA has conducted annual inspections of permitted CAFOs. Two new CAFO inspector positions have been created for the south and mid-coast CNPCP area. An inspector based in Tillamook will also service the northern portion of the CNPCP area. The state also has a complaint-driven enforcement process and an educational outreach program.

### B. EROSION AND SEDIMENT CONTROL, NUTRIENT, PESTICIDE, GRAZING, AND IRRIGATION WATER MANAGEMENT

**CONDITIONS:** Within one year, Oregon will (1) designate agricultural water quality management areas (AWQMAs) that encompass agricultural lands within the 6217 management area, and (2) complete the wording of the alternative management measure for grazing, consistent with the 6217(g) guidance. Agricultural water quality management area plans (AWQMAPs) will

include management measures in conformity with the 6217(g) guidance, including written plans and equipment calibration as required practices for the nutrient management measure, and a process for identifying practices that will be used to achieve the pesticide management measure. The State will develop a process to incorporate the irrigation water management measure into the overall AWQMAPs. Within five years, AWQMAPs will be in place.

**FINDING:** Oregon has satisfied these conditions.

**RATIONALE:** Oregon has satisfied the conditions for designating AWQMAs [1010 plans]. The State has established seven Agricultural Water Quality Management Areas (AWQMAs) covering its coastal nonpoint program boundary and has developed Agricultural Water Quality Management Area Plans (AWQMAPs) consistent with the (g) guidance for all these areas. All agriculture management measures have been included in the appendices of the coastal 1010 plans, and in some cases the measures have been incorporated directly into the plans.

ODA and DEQ have established a joint process to revise the AWQMAPs every two years. NOAA and EPA encourage Oregon to use this process to insert the agricultural management measures into the body 1010 plans over time and to more closely link 1010 plans with TMDL load allocations. Recommendations in the plans are voluntary. The mandatory part of the program are the rules associated with each plan that specify prohibited conditions related to a few of the recommendations. While ORS 568.900-568.933 and OAR 603-090-0000 through 603-090-0120, do grant ODA the authority to adopt rules necessary to implement the plans and to address water pollution problems where voluntary compliance is not achieved, it is not yet clear whether the biennial plan and rule revision process will link enforcement capability to the management measures as needed to meet water quality goals. NOAA and EPA strongly encourage DEQ and ODA to do a thorough sufficiency analysis every two years and revise the plan and rules accordingly. Also NOAA and EPA are concerned that, in actuality, the State does not always take enforcement action when needed. Therefore, NOAA and EPA also strongly encourage ODA to take a more active enforcement role to ensure the 1010 plans and (g) measures are being implemented as designed. A Memorandum of Agreement between DEQ and ODA memorializes coordination efforts addressing TMDLs for water quality limited water bodies and 1010 plans. The MOA includes a commitment by ODA to modify 1010 plans to address the AWQMAPs. In fact, TMDL load allocations. The MOA potentially ensures that ODA will evaluate 1010 plans to assure attainment of DEQ's load allocation for agriculture. By including the (g) measures in the appendix of 1010 plans, enforceable under ORS 568.900-568.933, Oregon has demonstrated the AWQMAPs will include measures in conformity with the 6217 guidance.

The State also has specific programs for nutrient management and irrigation that provide additional support for the 1010 plans. Nutrient management plans, consistent with the (g) guidance, are required under all new or expanded CAFO permits (Oregon Confined Animal Feeding Operation General Permit Number 01, May 2003 draft, in compliance with the provisions of Oregon Revised Statutes (ORS) Chapter 468B, Oregon Administrative Rules (OAR) Chapter 603, Division 74, The Federal Water Pollution Control Act as amended (The Clean Water Act)

Title 33 United States Code, Section 1251 et seq., and the National Pollutant Discharge Elimination System (NPDES)) under the CAFO laws and rules, ODA has the authority to require nutrient management plans as part of compliance orders they issue to correct nutrient or waste load violations. The Water Resources Department's (WRD) Water Use Basin Programs codified in OAR Chapter 690 support the irrigation measure by establishing sub-basin classifications and limits on water use. NOAA and EPA encourage the ODA and DEQ to improve their coordination with WRD to ensure implementation of the 6217 irrigation measures. Oregon State University has also developed Western Oregon Irrigation Guides which include information on timing, measuring soil-water depletion and application rates.

Finally, the State has completed the wording of the alternative management measure for grazing by including language consistent with the (g) measure as recommended practices in the appendix of all AWQMAPs as noted above.

Even though AWQMAPs are developed on a watershed scale and cover the entire 6217 boundary, NOAA and EPA are concerned that, since the impetus for the AWQMAP planning process is driven by TMDLs, people may assume that measures need only to be implemented in specific areas where water quality is degraded. Site-specific implementation triggered by degradation rather than implementation across the landscape, would not meet the 6217 goals of pollution prevention. Also, if a specific parameter is not listed on the 303(d) list, the AWQMAP may not include the related management measure, even though the measure is included in the appendix. Therefore, NOAA and EPA encourage the state to take a holistic, pollution prevention approach when upgrading their 1010 plans to incorporate all agricultural management measures and ensure the plans are being implemented properly throughout the 6217 area.

## III. URBAN

### A. NEW DEVELOPMENT, SITE DEVELOPMENT, CONSTRUCTION SITE EROSION AND SEDIMENT, AND CHEMICAL CONTROL

**CONDITION:** Within two years, Oregon will include in its program management measures in conformity with the 6217(g) guidance and enforceable policies and mechanisms to ensure implementation throughout the 6217 management area.

**January 13, 2004 FINDING:**

- The state is exempt from the Construction Site Erosion and Sediment Control and Construction Site Chemical Control measures throughout the 6217 boundary. These measures are now covered under the NPDES Phase I and II Stormwater Program.

**June 25, 2008 FINDING:**

- Outside of Phase I and II designated areas, Oregon has not satisfied the management measure component of the New Development management measure
- Oregon has demonstrate it has enforceable policies and mechanism in place to ensure

implementation of the new and site development measures throughout the 6217 boundary.

**RATIONALE:** To address the new development measure outside of designated NPDES Phase I and II stormwater areas, Oregon has proposed relying on its TMDL implementation strategy. NOAA and EPA had previously agreed this could be a plausible approach given that TMDLs have wide geographic coverage in Oregon and that almost all communities within the 6217 management area must meet load allocations for sediment. However, the state needed to finalize the TMDL Implementation Plan Guidance so that it would include specific recommendations consistent with the (g) guidance for new development. The outline of the guidance document that EPA and NOAA reviewed in 2003 was very promising, including references to "no net increases of off-site run off."

NOAA and EPA were discouraged to find that the final TMDL Implementation Plan Guidance provided in the recent submittal does not contain any specific recommendations that are consistent with the (g) guidance for new development. The guidance document does not even recommend plan developers consult the 6217(g) guidance when developing TMDL Implementation Plans within the 6217 boundary. Since specific recommendations to incorporate the new development measure are not included in the guidance, there is no guarantee that Implementation Plans developed would reduce TSS by 80% or maintain post-development peak runoff rates to pre-development levels to the maximum extent practicable as per the new development measure. Based on the two completed implementation plans Oregon provided, all plans are not being developed to a level consistent with the (g) guidance for new development. The Curry County Plan does reference its new stormwater ordinance, which requires reducing the amount of post-development runoff consistent with the (g) guidance as well as provides best management practice standards that could reduce total suspended solids per (g) guidance requirements. However, the Jackson County Plan merely mentions "evaluating the potential for requiring erosion control permits and inspections for construction activities < 1 acre of soil disturbance," which does not address the new development requirements. While initially promising, it does not appear that the State's current TMDL approach will enable Oregon to satisfy the new development requirements for the 6217 (g) measures.

NOAA and EPA are encouraged to hear that DEQ is in the process of drafting new TMDL Implementation Guidance specifically for coastal urban areas, which will include specific recommendations consistent with the (g) guidance for new development. We strongly encourage the state to move forward with this revision and would be happy to review drafts of the guidance to ensure that it would meet new development requirements for the Coastal Nonpoint Program.

While we understand the updated TMDL Implementation guidance may take a couple of years to finalize, Oregon may be able to peruse other avenues for meeting the new development condition in a shorter timeframe. Developing a voluntary program based on its Water Quality Model Code and Guidebook (see discussion below) could be one option. Another option could be to show that a significant number of counties/local governments within the 6217 boundary have developed stormwater ordinances that are consistent with the (g) guidance. Although Portland is not in the

6217 boundary, the Low Impact Development (LID), stormwater, CSO control policies and approaches the City has implemented provide a good model for policies that could be adopted within the boundary area to meet the new development management measure. NOAA and EPA encourage Oregon to use the Portland experience to speed adoption of LID throughout its 6217 management area.

The State may also want to explore opportunities to require any projects that receive state funding to be consistent with the new development management measure. Federal agencies are already required to implement Section 438 of the Energy Independence and Security Act of 2007, which stipulates that, "The sponsor of any development redevelopment project involving a Federal facility with a footprint that exceeds 5,000 square feet shall use site planning, design, construction, and maintenance strategies for the property to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume, and duration of flow." State adoption and implementation of this provision or a similar policy would help the state further implement the new development measure when state funding is involved.

Regarding the site development measure, Oregon has described a number of programs that, when combined, enable the state to satisfy this condition including its NPDES General Permit for Construction Activities, State Land Use Goals, and Water Quality Model Code and Guidebook.

All activities that disturb more than an acre of land must receive a NPDES General Permit for Construction Activities. The General Permit includes, as additional control practices which must be developed if appropriate to the site, recommendations to minimize the area of disturbance and requires the permittee to describe practices that will protect existing vegetation.

State Land Use Goals 5, 6, and 7 can also protect areas that provide water quality benefits, limit disturbance of natural drainage features, minimize impervious surfaces, and limit clearing and grading within identified significant natural resource areas. State law requires reach city and county to adopt a comprehensive plan and the zoning and land-division ordinances needed to put the plan into effect. The local comprehensive plans must be consistent with the statewide planning goals.

The Water Quality Model Code and Guidebook, a voluntary guidance manual, includes guidelines and examples that are consistent with the (g) guidance for site development such as limiting impervious surface, retaining natural vegetation, protecting areas that provide important water quality benefits, and limiting disturbance of natural drainage features. According to a January 2001 hardcopy edition that NOAA and EPA reviewed, the guidebook also includes many practices that are consistent with the (g) guidance for new development. However, the October 2001 version that is available online is missing the critical stormwater plan section that establishes guidelines and best management practices that should be incorporated into a stormwater plan to reduce total suspended solids. While Oregon did actively promote the guidebook to local planners when it was first released in 2001, the federal partners are unclear if the state continues to

work with planners to make sure they are aware of and using the guidebook as designed, especially since critical information that is needed to help satisfy the new development measure is missing from the online version. Without additional information about how the state is actively promoting and tracking its use, NOAA and EPA do not feel that the voluntary guidebook would be acceptable for meeting the new development condition by itself.

NOAA and EPA understand that the state is currently updating the Model Code and Guidebook. The state anticipates distributing it to city and county planning directors via CD and the web this spring/summer. NOAA and EPA look forward to reviewing the updated document. In addition to distributing the document to local planners and announcing the new release at a statewide planning conference, we strongly encourage the state to take a more proactive approach to educating and training local planners and other decision makers about the guidebook.

Per the *1998 Final Administration Changes Memo,* states can use voluntary approaches such as the guidebook to satisfy the (g) measures if they provide: (1) a legal opinion; (2) a description of the voluntary programs the state will use to encourage management measure implementation, including methods for tracking and evaluating those programs; and (3) a description of the mechanism or process that links the implementing agency with the enforcement agency. The state has submitted a legal opinion from its Attorney General demonstrating Oregon has the necessary back-up authority through its Water Quality Statutes (ORS 468B et. seq.) to require implementation of both the new and site development management measures. The legal opinion also describes the link between the implementing and enforcing agencies. The updated voluntary Water Quality Model Code and Guidebook, coupled with an active outreach/training program, perhaps through partnerships with Sea Grant or the South Slough National Estuarine Research Reserve's Coastal Training Program, and a tracking component to ensure adequate implementation of model code adoption across the coastal nonpoint management area would satisfy the second element. To ensure adequate implementation of model code adoption, Oregon should establish targets for the number of communities or percent of population in the 6217 management area consistent with this goal. Of course, this assumes the updated guidebook is still consistent with the (g) guidance for new development.

Finally, effective December 20, 2002, NOAA and EPA have determined that states are exempt from the construction site erosion and sediment control and construction site chemical 6217(g) management measure requirements. These activities are covered through the National Pollution Discharge Elimination System (NPDES) Phase I and II stormwater permit program throughout the 6217 management area.

## B. WATERSHED PROTECTION AND EXISTING DEVELOPMENT

**CONDITION:** Within three years, Oregon will further develop its program to implement the management measures for watershed protection and existing development in conformity with the 6217(g) guidance throughout the 6217 management area.

**January 13, 2004 FINDING:** Oregon has satisfied this condition.

**RATIONALE:** Do not have e-copy.

## C. NEW AND OPERATING ONSITE DISPOSAL SYSTEMS

**CONDITION:** Within two years, Oregon will finalize its proposal to inspect operating OSDS, as proposed on page 143 of its program submittal.

**June 25, 2008 FINDING:** Oregon has not satisfied this condition.

**RATIONALE:** Oregon has demonstrated that it has an adequate and very strong inspection program for alternative treatment systems and has a viable inspection system for responding to complaints, although NOAA and EPA would like clarification on how the State determines what constitutes a "high priority complaint." However, Oregon still lacks an adequate inspection program to proactively inspect conventional septic systems throughout its coastal nonpoint management area.

NOAA and EPA note that DEQ may still pursue rule changes to require regular inspections of existing OSDS. While we encourage the state to continue to seek a rule change, we also recognize that this may take a long time and can be politically challenging to achieve.

Outside of a rule change, NOAA and EPA appreciate the state's focus on encouraging point-of-sale inspections and the effort it has put into the program so far. For the voluntary approach to be approved, the following deficiencies need to be addressed:

1) The 85% goal is "tentative" and tracking is not sufficiently robust. There should be a solid back-up plan that kicks into place if early tracking efforts reveal that the 85% goal is not attainable under the proposed strategy. NOAA and EPA recommend that a statistically valid survey of real estate agents, brokers, and/or lenders be conducted at a maximum of 5-year intervals, in keeping with the program's three 5-year plans over the 15-year implementation period. Interim milestones for each surveyed interval should be established.
2) Sufficient resources should be in place to ensure that the interim milestones and final 85% goal are realistic and attainable during each 5-year plan period and 15-year program implementation period. NOAA and EPA recommend that a minimum of $100,000 be set aside each year to address this condition, under the State's section 319 allocation bundled into its performance partnership grant.
3) NOAA and EPA encourage Oregon to have OSDS inspections be conducted by inspectors who are certified through a nationally recognized inspector-training program that relies on standardized criteria and protocol. While NOAA and EPA recommend this as a required element of Oregon's voluntary inspections strategy, short of this, a robust incentive-based approach toward using certified inspectors is also acceptable.

## D. ROADS, HIGHWAYS, AND BRIDGES

**CONDITION:** Within two years, Oregon will (1) develop management measures in conformity with the 6217 (g) guidance for construction site chemical control; (2) develop enforceable policies and mechanisms to implement the roads, highways and bridges measures on all federal and State highways throughout the 6217 management area; (3) develop management measures in conformity with the 6217 (g) guidance and enforceable policies and mechanisms for local roads, highways, and bridges throughout the 6217 management area; and (4) provide a strategy (in accordance with section XII, pages 19-20) for use of the State's water quality law (ORS 468B) as a back-up enforceable mechanism to ensure implementation of the management measures for operation and maintenance and for runoff systems, as proposed on pages 155 and 157 of the State's program submittal.

**June 25, 2008 FINDING:** Oregon has satisfied these conditions.

**RATIONALE:** Effective December 20, 2002, NOAA and EPA have determined that designated MS4 areas are no longer subject to the Road, Highway and Bridge requirements of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA) Section 6217 Coastal Nonpoint Pollution Control Program due to their coverage in the National Pollution Discharge Elimination System (NPDES) stormwater permit program (Phase I and II). In addition, state coastal nonpoint control programs are no longer required to include the Construction Projects and Construction Site Chemical Control Management Measures throughout the 6217 boundary because the NPDES stormwater regulations for industrial activities on construction sites apply nationwide and therefore throughout the coastal management areas of states and territories.

Outside of MS4 areas, ODOT's Phase I Stormwater NPDES MS4 General Permit enables the state to satisfy the remaining roads, highways and bridges conditions for state and federal roadways. For local roads, Oregon uses a voluntary approach backed by enforceable authorities. The state encourages local governments to follow ODOT's maintenance and construction manuals which are consistent with the (g) guidance and holds training sessions that many local government road crews attend to learn about best management practices for road construction and maintenance. For example, in February 2001, ODOT sent a letter to all local governments, recommending they use the department's manuals.

The DEQ's TMDL Implementation Plan guidance further promotes ODOT's manuals for use by local governments as a way of addressing water quality impairments (see sample Management Plan and Existing Plan Checklists for Willamette). Completed TMDL Implementation Plans for Jackson and Curry Counties demonstrate that counties are adopting ODOT's manuals to reduce polluted runoff from road siting and maintenance activities.

The Oregon Watershed Enhancement Board provides funding for a variety of watershed

enhancement activities, including improvements to existing roads, highways and bridges to reduce polluted runoff. In the most recent summary report, nearly $30M of OWEB funds went to road improvements statewide during FY 2002 and 2003. The state estimates that one third of those funds were spent within the 6217 management area.

Oregon has submitted a legal opinion from its Attorney General pursuant to the *1998 Final Administration Changes Memo* to demonstrate it has the necessary back-up authority through its Water Quality Statutes (ORS 468B et. seq.) to require implementation of the voluntary elements of the road, highway and bridges management measures.

## IV. MARINAS

### A. MARINA FLUSHING, WATER QUALITY, and HABITAT ASSESSMENT

**CONDITION:** Within three years, Oregon will include in its program enforceable policies and mechanisms to implement the marina flushing and habitat assessment management measures throughout the 6217 management area.

**June 25, 2008 FINDING:** Oregon has satisfied this condition.

**RATIONALE:** New or expanded marinas require a removal-fill permit from the Division of State Lands (DSL). The review process for these permits enables DSL to implement both the marina flushing and habitat assessment management measures. DSL developed a permit review checklist in 2004, to guide permit reviewers in what they should be looking for when reviewing marina permit applications. The checklist includes marina flushing and recommends (g) guidance best management practices for flushing to achieve adequate water quality. To address habitat issues, DSL permit reviewers must condition the permits to "avoid or minimize impacts to fish and wildlife resources" when conducting in-water or shoreline work (141-085-0029(7)(c)).

In addition to DSL's direct review, Oregon's Department of Fish and Wildlife (ODFW) also reviews marina applications under the removal-fill law (ORS 196.795-990) to advise DSL on its permit decisions. ODFW has three policy standards (#14304, #14309, and #14310) consistent with the (g) guidance for flushing to guide their permit evaluations.

In estuarine areas, the habitat assessment measure is also supported by the State's Land Use Goal 16 (OAR 660-015-0010(1)) which provides the State with enforceable policies and mechanisms to implement the habitat assessment measure in the estuarine areas of the 6217 boundary. Goal 16 requires all local jurisdictions in the coastal zone to evaluate estuaries and identify appropriate locations for water dependent uses, including marinas. The existing natural condition and function of the estuary must be considered during the evaluation process. Specifically marinas are prohibited in areas with "natural" designations. Natural areas, at a minimum, must contain all major tracts of saltmarsh, tideflats and seagrass beds.

**B. SHORELINE STABILIZATION, STORMWATER RUNOFF, FUELING STATION DESIGN, SOLID WASTE MANAGEMENT, LIQUID MATERIAL MANAGEMENT, and PETROLEUM CONTROL**

**CONDITION:** Within three years, Oregon will develop management measures in conformity with the 6217(g) guidance and enforceable policies and mechanisms to ensure implementation of these management measures throughout the 6217 management area.

**February 17, 2004 FINDING:** Oregon has satisfied this condition.

**RATIONALE:** Do not have e-copy.

**C. SEWAGE FACILITY MANAGEMENT and MAINTENANCE**

**CONDITION:** Within three years, Oregon will include in its program enforceable policies and mechanisms to ensure implementation of these management measures throughout the 6217 management area.

**February 17, 2004 FINDING:** Oregon has satisfied this condition.

**RATIONALE:** Do not have e-copy.

**D. FISH WASTE and BOAT CLEANING**

**CONDITION:** Within three years, Oregon will issue an NPDES general permit for fish waste management, which will apply to all facilities identified in the 6217(g) guidance.

**February 17, 2004 FINDING:** Oregon has satisfied this condition.

**RATIONALE:** Do not have e-copy.

**E. BOAT OPERATION**

**CONDITION:** Within three years, Oregon will include management measures in conformity with the 6217(g) guidance.

**February 17, 2004 FINDING:** Oregon has satisfied this condition.

**RATIONALE:** Do not have e-copy.

**V. <u>HYDROMODIFICATION</u>**

**CONDITION:** Within two years, Oregon will develop processes to identify and implement opportunities to (1) improve the physical and chemical characteristics of surface waters and

instream and riparian habitat in existing modified channels and (2) stabilize eroding streambanks or shorelines causing nonpoint problems that are not reviewed under existing authorities. Also within two years, Oregon will include in its program the dam management measures for chemical and pollutant control and protection of surface water quality and instream and riparian habitat in conformity with the (g) guidance. Within three years, Oregon will also either modify the exemptions to the removal-fill program or demonstrate that the exemptions do not preclude the State from fully implementing the management measures.

**FINDING:** Oregon has satisfied these conditions.

**RATIONALE:** Oregon, through a number of related restoration and protection initiatives, has developed a process to identify and implement opportunities to improve the physical and chemical characteristics of surface water in existing modified channels. Oregon has also developed a process to identify opportunities to restore instream and riparian habitat. Key components include: the Oregon Plan for Salmon and Watersheds, a framework for anadromous fish recovery which fosters local watershed council work to assess and restore watersheds; the Healthy Streams Partnership; the Oregon Watershed Enhancement Board, which funds riparian restoration projects, including stream habitat enhancement and restoration of previously altered stream reaches; the Oregon Aquatic Habitat Restoration and Enhancement Guide, which provides guidance on identifying and conducting restoration activities and state agency criteria and priorities for restoration; riparian management components of Agriculture Water Quality Management Area Plans; and Oregon's Statewide Riparian Management Policy.

In addition, in May of 2002, the Governor's Office published a progressive "Statewide Riparian Management Policy" that states "State agency programs that affect riparian zones should seek to manage for riparian functions as much as possible along the entire stream system, consistent with regional ecology, site capability, and social and economic needs." Among the riparian functions listed are filtration of sediments, organic material, and toxic substances in surface runoff.

Eroding stream banks in the 6217 management area are primarily due to forestry and agricultural practices which result in the removal of vegetation from riparian areas. The opportunities for riparian corridor restoration identified via the watershed assessments, Oregon Aquatic Habitat Restoration and Enhancement Guide, and the activities of the Riparian Management Working Group, will help to address the effects of vegetation removal on eroding stream banks. In addition, ODA and ODF have entered into a Memorandum of Understanding with DEQ relating to the development of TMDLs and Agriculture Water Quality Management Area Plans (AWQMAPs), both mechanisms for addressing eroding streambanks. Finally, the State is encouraging the use of bioengineering techniques in bank stabilization projects undertaken by property owners. These projects must be reviewed and permitted by DSL and receive section 401 Water Quality Certification by DEQ. Both authorities have guidelines which favor the use of bioengineering techniques in stabilization projects.

The Oregon Water Resources Department (OWRD) reviews all dam construction, operation, and

maintenance activities. Under OAR 690, Division 310 OWRD must determine whether the proposed surface water use will impair or detrimentally affect the public interest. OWRD can then condition dam construction, operation and maintenance activities through its review of permits for water appropriations to protect surface water quality, and instream and riparian habitat. OAR 690-31–0120(3)(b) defines minimum factors to be considered for new appropriations, including "water quality, with special attention to sources either listed as water quality limited or for which total maximum daily loads have been set . . . and sources which the Environmental Quality Commission has classified as outstanding resource waters." OAR 690, Division 33 establishes additional public interest standards with regard to sensitive, threatened, or endangered fish species, and requires OWRD to follow recommendations of an interagency review team comprising representatives of ODA, DEQ, ODFW, OWRD, and other state natural resource agencies as appropriate.

When conditioning a permit, OWRD draws from a list of standard conditions. Several conditions address dam construction, operation and maintenance activities, including withdrawals, fish habitat, sediment, and downstream water quality. OWRD has demonstrated is can and does condition dam construction, operation and maintenance activities through its water appropriations permit review process to protect surface water quality, and instream and riparian habitats consistent with the (g) guidance.

EPA and NOAA have determined that, effective December 20, 2002, state coastal nonpoint control programs are no longer required to include the dam management measure for chemical and pollutant control in their Coastal Nonpoint Pollution Control Programs because the NPDES storm water regulations for industrial activities on construction sites apply nationwide and therefore throughout the coastal management areas of states and territories.

Previously, removal and fill activities involving 50 cubic yards or less of material that were not located within essential fish habitat were exempt from the removal fill laws (OAR 141.085). The rule also limited the Department of Fish and Wildlife (ODFW) from designating more then 20% of any stream as essential fish habitat. Division 102 of the OAR has since been amended to expand the essential fish habitat classification. Now 75-80% all waterbodies in the 6217 management area are designated essential habitat, thus removing the 50 cubic yard exemption for removal and fill activities.

In December 2002, the Division of State Lands amended the removal and fill administrative rules (OAR 141.085) to make Oregon's laws consistent with the federal 404 permit exemptions and more clearly define exempt maintenance and reconstruction activities and exempt farm and forest practices. The state has demonstrated that these minor exemptions will not have a significant impact on surface water quality or impact the state's ability to implement the (g) measures. First of all, the state's main strategy for implementing the maintenance aspects of the channelization/ channel modification and eroding stream banks management measures is no longer the removal-fill regulations. The state is now relying on a variety of programs such as Oregon's Watershed Enhancement Board grants program, the Oregon Aquatic Habitat and Restoration

Enhancement Guide, and the Agriculture Water Quality Management Area Plans (see above hydromodification sections for more details). In addition, the state has also demonstrated that (g) measure requirements for dam maintenance are addressed through Oregon's Water Resources Department permit program (see dam management measures for more in-depth discussion.)

## VI. WETLANDS, RIPARIAN AREAS, AND VEGETATED TREATMENT SYSTEMS

**CONDITION:** Within two years, Oregon will include in its program management measures in conformity with the 6217 (g) guidance to assure the protection of riparian areas. The State will also develop a process to promote the restoration of riparian areas in conformity with the 6217 (g) guidance.

**June 25, 2008 FINDING:** Oregon has satisfied this condition.

**RATIONALE:** Oregon preserves riparian areas under State Land Use Goal 5. The goal requires local governments to inventory natural resources, including riparian areas, and adopt programs that will preserve significant riparian areas. Local governments can elect to use the "safe harbor" criteria (a streamlined designation process) or the more detailed standard Goal 5 process to identify significant riparian areas. Under the "safe harbor" process, all riparian corridors adjacent to fish bearing streams and lakes are considered significant riparian resources. Local governments must pass ordinances to establish either a 75 or 50 foot riparian protection zone depending on the size of the waterbody. Development, vegetation removal and impervious surfaces are generally prohibited within these protection zones. Exemptions are only granted if equal or better protection for riparian resources is provided through riparian restoration or enhanced buffer treatment.

Under the standard Goal 5 process, local governments are required to conduct a comprehensive inventory of their riparian areas to identify significant riparian resources. The significance of each riparian area must be justifiable based on findings derived from the inventory. The DLCD reviews the inventories to determine they are adequate. The standard process acknowledges that local governments do have to manage other priority land uses that may conflict with riparian protection. Nonetheless, they are still required to establish an effective management strategy for riparian resource protection.

All cities with a population greater than 2,500 and all counties with a population greater then 15,000 must also periodically update their comprehensive plans. All counties within the 6217 management area are required to undergo these periodic reviews. At this time, they must conduct new inventories of significant riparian resources and ensure they have programs in place to protect Goal 5 resources.

Oregon has also supported riparian protection through OWEB funded projects. According to the 2007 Report to Congress on the Pacific Coastal Salmon Recovery Funds, over $5 million in OWEB funding has helped acquire and permanently protect water quality and fisheries habitat on

over 2,300 acres of critical, ecologically significant areas within Oregon's coastal basins.

Agriculture and forestry activities are exempt from Goal 5 requirements; however, riparian protection involving these activities is addressed directly through SB1010 plans (agriculture) and the Forest Practices Act (FPA) (forestry). For example, as described earlier under the Agriculture Management Measures section, agriculture water quality management areas (AWQMAs) have developed management plans (SB1010 plans) and administrative rules consistent with the (g) guidance for the agricultural measures which includes practices to protect sensitive areas such as riparian zones. The administrative rules also state that riparian management should be conducted to allow for the establishment, growth and maintenance of riparian vegetation.

Oregon's TMDL program can also play an important role in riparian protection. All the basins within the 6217 boundary have water quality impairments for temperature. To address this impairment, each designated management agency (DMA) within the listed sub-basins must develop TMDL Implementation Plans for temperature. Riparian protection and restoration are important components for reducing temperature impairments as riparian areas provide needed shading to waterways. Several TMDL Implementation Plans that have been completed are consist with the (g) guidance for riparian protection. However, since the TMDL Implementation Plan guidance does not recommend specific riparian protection practices to address temperature impairments or even reference the (g) guidance, there is no guarantee that all subsequent TMDL Implementation Plans would be consistent with the (g) guidance for riparian protection. NOAA and EPA strongly encourage Oregon to consider revising the TMDL Implementation Plan guidance to, at a minimum, require DMAs within the 6217 management area to consult the (g) guidance and incorporate practices consistent with the (g) guidance as appropriate, when developing Implementation Plans.

In the conditional findings on Oregon's Coastal Nonpoint Program, NOAA and EPA stated concern that forest land riparian areas were not being protected when the land was converted to another use under existing programs. In 2006, Oregon finalized a Memorandum of Agreement (MOA) between the Departments of Forestry, Agriculture, State Lands, Fish and Wildlife, Parks and Recreation, Land Conservation and Development, and Environmental Quality to address this issue. The MOA clearly establishes a process for notifying all signatory agencies when forest land is converted to other uses so that each agency can ensure that its responsibilities in protecting water quality and riparian areas will be carried out. The landowner/operator must submit a Plan for an Alternative Practice to ODF that addresses potential water quality or natural resource impacts of the proposed alternative practice. ODF then shares the plan with the other agencies for review. No conversion activity will be approved unless it complies with the resource protection rules of the appropriate state agency(ies) that have jurisdiction over the new activity.

## VII. ADMINISTRATIVE COORDINATION

**CONDITION:** Within one year, Oregon will establish a process for ensuring coordination among State and local agencies with a role in the implementation of the coastal nonpoint program.

**April 2004 FINDING:** Oregon has satisfied this condition.

**RATIONALE:** Oregon has established a process for ensuring coordination among State and local agencies to implement the coastal nonpoint program by developing formal coordination mechanisms such as memorandum of understanding, advisory boards, agency outreach to local municipalities, and having regular informal communication among parties responsible for the program.

The Department of Environmental Quality (DEQ) has signed separate Memorandums of Understanding (MOUs) with the Oregon Department of Agriculture (ODA) and the Oregon Department of Forestry (ODF) to outline agency roles in developing and revising agricultural 1010 Plans and TMDLs for forestry, respectively. Several state agencies including DEQ, ODF, the Oregon Department of Water Resources, and the Department of Fish and Wildlife, have also signed an MOU to provide for continued cooperation to achieve the goals of the Oregon Plan for Salmon and Watersheds, many aspects of which address 6217 (g) measures.

The Community Solutions Team Advisory Board is comprised of several state agencies including the DEQ, ODF, the Department of Land Conservation and Development (DLCD) and the Department of Transportation. The Advisory Board coordinates local development issues including many topics relevant to the coastal nonpoint program such as TMDLs and land use laws.

Oregon's Coastal Management Program also conducts regular outreach to local governments within the coastal zone. Discussions include development and implementation of the coastal nonpoint program.

Finally, agency staff involved in the coastal nonpoint program regularly communicate with one another through informal channels. Both DEQ and DLCD have staff dedicated to the coastal nonpoint program and these individuals work with appropriate people at the other state and local agencies as needed to develop and implement the coastal nonpoint program. NOAA and EPA encourage DLCD and DEQ, as the lead state agencies for the coastal nonpoint program, to continue coordination efforts with other state and local government agencies. In particular, they should proactively involve partner agencies such as the Department of Forestry and Department of Health in order to meet the state's remaining conditions and implement the coastal nonpoint program throughout the 6217 management area.

## VIII. CRITICAL COASTAL AREAS, ADDITIONAL MANAGEMENT MEASURES AND TECHNICAL ASSISTANCE

**CONDITION**: Within two years, Oregon will identify and begin applying additional management measures where water quality impairments and degradation of beneficial uses attributable to forestry exist despite implementation of the (g) measures. Within two years, Oregon will develop a process for the identification of critical coastal areas and a process for developing and revising

management measures to be applied in critical coastal areas and in areas where necessary to attain and maintain water quality standards. Also within two years, the State will develop a program to provide technical assistance in the implementation of additional management measures.

**April 2004 FINDING:**

- Oregon has developed a process to identify critical coastal areas and a process to develop and revise management measures to be applied in critical coastal areas and in areas where necessary to attain water quality standards.
- Oregon has developed a program to provide technical assistance in the implementation of additional management measures.
- Oregon has not satisfied the condition for additional management measures for forestry.

**RATIONALE:** Oregon has described a process for identifying critical coastal areas that considers the factors recommended in the NOAA/EPA *1993 Program Development and Approval Guidance.* Statewide Planning Goal 16, Estuarine Resources (OAR 660-015-0010(1)) recognizes the importance of protecting Oregon's estuaries where new or substantially expanding uses could cause or contribute to water quality impairment. Goal 16 requires classification of Oregon's estuaries into one of four types–natural, conservation, shallow draft development, or deep draft development. The estuary areas are further divided into "distinct water use management units" which define the permissible uses within each unit. In estuaries classified as natural or conservation, only activities which support these designations are allowed. Therefore, Goal 16 is an appropriate vehicle for identifying critical coastal areas in estuaries.

In addition, the OWEB watershed assessment protocol lays out a process to identify and map areas within watersheds that are in need of protection. Such a process is a good vehicle to identify critical coastal areas in the coastal watersheds. The watershed assessments are used to develop restoration and enhancement plans and prioritize projects within each watershed.

TMDLs and their associated implementation plans can also identify critical areas for special attention. Oregon requires that TMDLs developed for impaired watersheds be accompanied by water quality management plans (WQMP) that specify load reductions, a schedule for meeting load reductions, and management authorities responsible for achieving the load reduction. It is anticipated that all watersheds in the 6217 management area will have TMDLs completed by 2006.

NOAA and EPA have determined that Oregon has satisfactorily developed a program to provide technical assistance. As described in the October 2002 submittal, Oregon has a number of on-going grant programs, publications, and workshops that provide technical assistance to support implementation of additional management measures. The State has adequately described the type of technical assistance provided (grants, technical assistance documents, training workshops); the agencies providing the technical assistance (DLCD, DEQ, OWEB, ODF); the intended recipients (coastal jurisdictions, watershed councils, individual land owners, forest operators); and a schedule of availability as required in the *Coastal Nonpoint Pollution Control Program: Program Development and Approval Guidance* (NOAA and EPA, January 1993).

**Additional Management Measures for Forestry (June 25, 2008)**

Based on Oregon's recent submittal and our understanding of Oregon's Forestry Program, EPA and NOAA still believe that Oregon lacks adequate management measures under the Oregon Forest Practices Act (FPA) rules for protecting water quality and the degradation of beneficial uses from forestry activities. EPA and NOAA's primary concerns, stated in the 1998 conditional findings and reiterated in the 2004 interim decision document, remain. Oregon still lacks adequate measures for protecting riparian areas of medium, small and non-fish bearing streams, high risk landslide areas, and for addressing the impacts of legacy roads. A broad body of science continues to demonstrate that the FPA rules do not adequately protect water quality.

NOAA and EPA support Board of Forestry (BOF) improvements to general road maintenance measures that require a better drainage network for water quality purposes (OAR 629-625-0330) and establish wet weather use requirements/restrictions (OAR 629-625-0700). These two measures, as well as the other improvements described in the submittal, should help reduce road related sedimentation. However, we remain concerned that a significant percentage of the road network on forest lands in Oregon continues to deliver sediment directly into streams, and that new drainage requirements are triggered only when road construction or reconstruction takes place. It is not clear how the rules address water quality impairment associated with legacy roads and a large portion of the existing road network where construction/reconstruction is not proposed. We recommend adoption of a road mapping and abandonment program that creates a requirement and timeline for addressing all active and legacy roads to ensure that water quality is protected. The road provisions in the Washington Forests and Fish Rules are examples that EPA and NOAA believe adequately address roads related water quality protection.

NOAA and EPA also support several recent FPA management measures adopted by the Oregon Board of Forestry (BOF) related to riparian management area requirements. Additional FPA management measures have been adopted to require increased riparian protection upstream from man-made fish barriers (OAR 629-635-0200(13)) and for substituting upland leave trees in riparian management areas along landslide prone non-fish streams (OAR 629-640-0210) likely to deliver wood to fish bearing streams. While these additional measures are an improvement over existing rules, they are not adequate to meet water quality standards or to ensure that beneficial uses such as domestic water supply and salmonid spawning and rearing will be protected. There is a substantial body of assessment and research that have identified the need for increased riparian protection beyond levels provided by the Oregon FPA.

Finally, NOAA and EPA note that there have been amendments to the Oregon Administrative Rules (OAR 629-623-0000 to 08000) to require identification of landslide hazard areas in stewardship plans, and during road construction and maintenance. Timber harvest and road construction are not allowed on sites with "substantial downslope public safety risk." While this rule change is a step in the right direction and helps to protect a subset of high risk landslide areas, hazards are defined only as they relate to risk for loss of life and property. The majority of small streams and landslide prone areas on private forest lands in Oregon still do not receive adequate

protection under the FPA rules. In order to protect water quality, NOAA and EPA strongly encourage Oregon to expand timber harvest and road construction management measures to apply to the high risk landslide areas that can deliver sediment to streams, lakes, and wetlands, not just to areas where property or human life are threatened.

The Oregon Forest Practice Rules and Statutes include best management practices to maintain water quality (ORS 527.765). Part (2) of this section requires the Board of Forestry (BOF) to consult with the Environmental Quality Commission, which is responsible for establishing the policies for the operation of the Department of Environmental Quality, including its water quality programs, as they adopt and review BMPs to address nonpoint source discharges from forest operations. The EQC can petition the Board of Forestry to initiate a "Basin Rule" change review to address inadequacies in the FPA management measures that are contributing to violations of water quality standards (ORS 527.765(3)(d)). The BOF cannot terminate the Basin Rule change review without the concurrence of the EQC. The Basin Rule change provisions that have been in place since 1994 have not been utilized by the EQC. We encourage the EQC to begin utilizing the Basin Rule change provisions where inadequacies in the Oregon FPA contribute to water quality impairment.

EPA and NOAA recognize the extensive voluntary protection and restoration efforts on forestry lands to improve water quality and protect riparian areas. NOAA and EPA continue to strongly support these voluntary efforts. However, the lack of adequate forestry management measures for riparian and landslide prone areas affects a substantial portion of the coastal zone, where 50% to 80% of the stream network in steep, forested watersheds consists of small streams that receive very limited protection. In addition to having direct adverse impacts to water quality, existing forestry practices have indirect adverse effects on the voluntary conservation and restoration efforts of local watershed groups. For example, the benefits of voluntary efforts to remove barriers to fish to allow access to upstream spawning and rearing habitats are offset when forestry practices along upstream reaches degrade riparian habitats and water quality.

While we acknowledge Oregon's extensive voluntary efforts, and its incremental progress on the regulatory front, NOAA and EPA do not believe the progress made is adequate to address the additional management measures for forestry condition on Oregon's Coastal Nonpoint Program. Both Federal agencies continue to believe that additional revisions to Oregon's FPA rules are needed to fully protect water quality and beneficial uses. NOAA and EPA urge the State to move forward expeditiously to adopt and implement additional management measures, either through application of basin specific rules or statewide changes to the FPA and OARs. By adequately addressing our riparian, road and land slide concerns throughout coastal watersheds, Oregon will have sufficient measures in place to address cumulative impacts from forestry as well. If Oregon still wishes to pursue a voluntary approach, backed by enforceable authorities, to address this condition, it must provide more specific information related to funding and project accomplishments on forestry lands within the 6217 management boundary and associated enforceable authorities.

**April 2004 Add MM for Forestry Rationale**

*NOAA and EPA have determined that Oregon has not fully satisfied the condition requiring the State to identify and begin applying additional management measures for forestry in several areas critical to water quality protection. NOAA and EPA agree that Oregon has processes in place to identify additional management measures for forestry through review procedures such as that of the Independent Multidisciplinary Science Team and the sufficiency analyses called for in the MOU between ODF and DEQ. However, Oregon has not yet begun to sufficiently apply additional management measures that address our water quality concerns. This determination is consistent with the determination we made in January 2003.*

*In the 1998 rationale for findings and conditions, EPA and NOAA identified areas under the Forest Practices Act and Administrative Rules that should be strengthened to attain water quality standards and fully support beneficial uses: "These areas include protection of medium, small, and non-fish bearing streams, including intermittent streams; protection of areas at high risk for landslides; the ability of forest practices to address cumulative impacts of forestry activities; road density and maintenance, particularly on so-called 'legacy' roads; and the adequacy of stream buffers for application of certain chemicals."*

*The latter concern about the adequacy of stream buffers for application of certain chemicals is being addressed by processes that may result in additional buffer protection requirements beyond those on existing labels in order to protect endangered species.*

*NOAA and EPA are pleased to note that more protective forestry rules to address landslides and road construction have been formulated and passed. Amendments to the Oregon Administrative Rules (OAR 629-623-0000 to 08000) require identification of landslide hazard areas in stewardship plans, and road construction and maintenance. Timber harvest and road construction are not allowed on sites with "substantial downslope public safety risk" and harvesting activities that occur on other high landslide hazard areas must use specific practices to prevent ground disturbance. However, hazards are defined only as they relate to risk for losses of life and property, not water quality. NOAA and EPA would like Oregon to explain how these new amendments protect surface water quality, if at all. There have also been other improvements in general road maintenance to provide a better drainage network for water quality purposes (OAR 629-625-0330) and to establish wet weather use requirements/restrictions (OAR 629-625-0700).*

*In March of 2003, Oregon submitted an update and additional information showing how the Oregon Department of Forestry (ODF) uses recommendations from the Forest Practices Advisory Committee (FPAC), the Independent Multidisciplinary Science Team (IMST), the ODF/DEQ Sufficiency Analysis, and the Eastside Riparian Functions Advisory Committee (ERFAC) to develop rule concepts for riparian areas. The submission included a Forest Practices Process Chart, some detail on recommendations, a sample of minutes from a Board of Forestry meeting, and an anticipated schedule for reviewing riparian concepts and rule making. At that time, it was anticipated that draft rules would be presented to the Board in June 2003 and that rules would be adopted in October 2003.*

*NOAA and EPA understand that this process is continuing but has fallen behind schedule. At this point, ODF and the Board of Forestry are considering eighteen draft rule concepts for water protection and riparian functions. They are deciding whether the action for each concept will be to draft a rule or to pursue a non-regulatory pathway. Once those decisions are made, the resultant package of draft rules will undergo an analysis of economic impact and examination of alternatives before being put out for public review. At present, three of the eighteen concepts are moving forward into the draft rule package and four of the eighteen concepts are being directed into non-regulatory pathways, leaving eleven still to be decided upon.*

*The rule concepts that relate most directly to the expressed concerns of the Coastal Nonpoint Program are the following:*

| ***Rule Concept*** | ***Proposed Action*** |
|---|---|
| *2. Use Type F prescriptions for large and medium Type N streams* | *Undecided* |
| *3. Riparian management areas (RMA) above fish barriers* | *Undecided* |
| *4. Wood from debris flows and landslides* | *Draft Rule* |
| *8. Basal area target increase for medium and small Type Fs* | *Draft Rule* |
| *9. 60% Basal area cap* | *Non-regulatory* |
| *10. No harvest within ½ RMA* | *Non-regulatory* |
| *11. Retain largest trees within the RMA* | *Non-regulatory* |
| *12. Small Type N streams* | *Undecided* |

*Since the BOF's decision-making and rule-making processes for these riparian rule concepts is still on-going, it is premature for EPA and NOAA to make a decision as to whether or not Oregon's approach will adequately address the riparian aspect of the condition. EPA and NOAA will not be able to make a conclusive decision until the new riparian rules have been adopted and/or voluntary, incentive-based programs have been developed that will enable water quality standards and TMDL shade targets to be achieved.*

*NOAA and EPA encourage the State to take progressive action on these riparian concepts. Recent analyses and studies such as the IMST review, the ODF /DEQ Shade Study funded by CWA Section 319, and TMDLs developed for several coastal watersheds demonstrate that the riparian management practices carried out under the current rules are not adequate to meet shade targets or water quality standards. Riparian rule concepts 2, 3, 8 and 10 have the greatest potential to*

*significantly improve upon management practices designed to achieve water quality standards, including temperature and shade targets. Therefore, we particularly encourage ODF to make progress in these areas.*

*In Executive Order No. EO 99-01, the Governor charged that:*

> *"(3)(c) The Oregon Board of Forestry will determine, with the assistance of an advisory committee, to what extent changes to forest practices are needed to meet state water quality standards and to protect and restore salmonids. . . . The Board may determine that the most effective means of achieving any necessary changes to forest practices is through regulatory changes, statutory changes or through other programs including programs to create incentives for forest landowners."*

*Therefore, as ODF and the Board of Forestry work to improve the riparian management program, they should ensure that the combination of rule changes and voluntary programs proposed will enable water quality standards to be achieved.*

*If the State wishes to pursue voluntary programs to address these additional management measures, the State would need to submit a legal opinion as required by the 1998 Administrative Changes Memo to demonstrate is has enforceable mechanisms and policies to back-up their voluntary approach. In addition, Oregon would have to provide: (1) a complete description of the voluntary or incentive-based programs, including the methods for tracking and evaluating those programs it will use to encourage implementation of the management measures; and (2) a description of the mechanism or process that links the implementing agency with the enforcement agency and a commitment to use the existing enforcement authorities where necessary.*

*Although the State is making progress to address many of the IMST recommendations and concerns NOAA and EPA raised in the conditional findings, very little progress has been made in addressing cumulative effects from forestry (IMST Recommendation #2). Cumulative impacts from forestry activities, including increased road density, continue to be an important concern that should be addressed. For example, a 1995 temperature study on the Olympic Peninsula concluded that stream temperatures cannot be successfully managed at the reach level unless harvest activities are evaluated on a basin-wide scale. NOAA and EPA recognize that implementing a program that considers the cumulative effects of forestry will require a significant policy change and may take several years to complete. NOAA and EPA strongly encourage Oregon to make progress on this over the next few years. The State should demonstrate a commitment to implement Recommendation #2 or similar program over time by developing a schedule and plan to do so.*

*Finally, EPA and NOAA continue to support and encourage the voluntary programs under the Oregon Plan for Salmon and Watersheds that address water quality, including projects for road surveys and improvement, fish passage, large wood placement, monitoring, and education. For example, Road Erosion and Risk Projects identify roads that present risks for salmon recovery, particularly targeting "legacy" roads, and establish priorities for reducing these road-related*

*risks. All roads on land belonging to members of Oregon's Forestry Industry Council are assessed through this program as well as some of the industrial and non-industrial forest lands. The State estimates that the forestry industry spends $13 million per year on road improvement projects in the coastal zone. In addition, the State Forests Program spent over $25 million between 1997-1999 on road restoration projects and are proposing to spend an additional $2.5 million over the next two years. These projects are valuable and worth tracking and reporting as part of program implementation. However, the information Oregon has provided on the amount of money that is directed toward these efforts is outdated. In order to help us evaluate the value of the voluntary programs, we would appreciate answers to the following questions: What percentage of forest land in the 6217 management area is included in the Road Erosion and Risk Projects Program? How much has been spent on road improvement, road restoration, and road decommissioning projects in the 6217 boundary between 2000 and 2003? How much is anticipated in the next few years?*

*NOAA and EPA urge the State to move forward expeditiously to implement these recommended additional management measures, either through application of basin specific rules, changes to the FPA and OARs or by implementing voluntary, incentive-based programs backed by enforceable authorities.*

## IX. MONITORING

**CONDITION:** Within one year, Oregon will include in its program a plan that enables the State to assess over time the extent to which implementation of management measures is reducing pollution loads and improving water quality.

**June 25, 2008 FINDING:** Oregon has satisfied this condition.

**RATIONALE:** Oregon has developed a general monitoring plan that enables the State to assess over time the extent to which the management measures are being implemented and improving water quality. The monitoring program has established a statewide rotating schedule for monitoring set reference sites and randomly selected sites for compliance with the State's water quality standards. Every year, the State samples 20% of both their reference and random sites for various parameters, including temperature, sediment, dissolved oxygen, biological criteria, pH, stream fertility, and some toxics. Depending upon the parameter sampled, Oregon has 50 or 75 established reference sites within the 6217 management area and an additional 50 or 150 random sites across the rest of the State. In addition, the State also conducts an estuarine monitoring program that specifically samples for temperature, salinity and bacteria in shellfishing areas. The State uses this monitoring information to develop 305(b) reports and TMDL Watershed Management Plans which may require additional management measures.

Senate Bill 945 also directs the Oregon Watershed Enhancement Board (OWEB) to develop and implement a statewide Monitoring Program in coordination with state natural resource agencies for activities conducted under the Oregon Plan for Salmon and Watersheds, many of which are

relevant to the (g) measures. *A Monitoring Strategy for the Oregon Plan for Salmon and Watersheds* describes the framework for the OWEB monitoring strategy. The Strategy includes assessing general status and trends for physical habitat and biotic conditions in selected sub-watersheds; documenting implementation of OWEB restoration projects; and evaluating the local effectiveness of restoration efforts by monitoring representative samples of specific project, activity and program types. Finally, the State will integrate information from multiple sources to produce data products and reports that assess restoration efforts and evaluate progress towards recovery goals.

In addition to these general monitoring programs, each TMDL Implementation Plan is also required to include a monitoring and assessment component to describe how the designated management agencies will routinely evaluate the effectiveness of the implementation plan and to determine if additional actions are needed to sufficiently improved impaired water bodies.

Forestry is the dominant land use within the 6217 boundary. Therefore, to better assess the implementation and effectiveness of the Forestry Practices Act (FPA), which is consistent with the (g) guidance, the Oregon Department of Forestry (ODF) carries out the Forest Practices Monitoring Program. The ODF's monitoring program described in the December 2002 *Forest Practices Monitoring Program Strategic Plan*, involves both BMP implementation and effectiveness monitoring. All monitoring data is available in a central database as part of the State of Forests Integrated Information System and ODF analyzes and reports on the information collected annually. The ODF has already released several monitoring studies including the effectiveness of forest road sediment and drainage control practices, harvest effects on riparian areas, effectiveness of the FPA at obtaining temperature standards, and a comprehensive study on BMP implementation. Based on the monitoring conducted, each report recommends changes to the FPA to the Board of Forestry in order to improve the forestry program.

NOAA and EPA encourage Oregon to continue to implement and improve upon the various monitoring programs that comprise their Coastal Nonpoint Control Program monitoring network. The State should continue to dedicate sufficient staff and resources to carry out the monitoring programs. In addition, Oregon should strongly consider developing a tracking/assessment program similar to the Forest Practices Monitoring Program for other select measures that address significant land uses within the 6217 boundary, such as key urban or agricultural measures. The ODF should also ensure that they continue to conduct comprehensive BMP implementation studies on a regular basis and work towards implementing recommendations from past monitoring studies in a timely manner.

## X. STRATEGY AND EVALUATION FOR BACKUP AUTHORITIES

Within two years, Oregon will develop a strategy to implement the management measures for confined animal facilities exempt for the State definition of CAFOs throughout the 6217 management area. Within one year, the State will develop a strategy to implement the roads, highways, and bridges management measures throughout the 6217 management area. These

strategies will include a description and schedule for the specific steps the State will take to ensure implementation of the management measures; describe how existing or new authorities can be used to ensure implementation where voluntary efforts are unsuccessful; and identify measurable results which, if achieved, will demonstrate the State's ability to achieve implementation of the management measures using the described approach.

Oregon will also develop and apply credible survey tools to demonstrate the ability of the State's approach to achieve implementation for these management measures. The use of credible assessment techniques is necessary in order for NOAA and EPA to evaluate, at the end of the three year period described in the March 16, 1995 guidance issued by NOAA and EPA entitled Flexibility for State Coastal Nonpoint Programs, whether the State's approach has been successful or whether new, more specific authorities will be needed.

**NOAA and EPA Preliminary Decisions on Information Submitted by Oregon to Meet Coastal Nonpoint Program Conditions of Approval**

## I. BOUNDARY

**CONDITION:** Within one year, the Oregon Department of Land Conservation and Development (DLCD), Oregon Department of Environmental Quality (DEQ), U.S EPA, NOAA, and other relevant State, local, and federal agencies will participate in a cooperative process to review relevant information and determine an appropriate 6217 management area boundary consistent with established national guidance for the 6217 program.

**FINDING:** Oregon has satisfied this condition.

**DETERMINATION:** The 6217 management area for the State of Oregon will be the existing coastal zone with the addition of the inland portions of the Rogue and Umpqua Basins, in their entirety. The inland boundary of the management area intersects the Columbia River at the westward end of Puget Island.

**RATIONALE:** The boundary of the 6217 management area on the Columbia River is near Washington's 6217 boundary. The inland boundary of Washington's management area intersects the Columbia River at the eastern border of WRIA 25, just east of the Wahkiakum County border.

The Columbia River Basin is a huge, multi-state and multi-national drainage basin covering 233,000 square miles; three states and Canada contribute to the water quality of the lower Columbia River. In Washington, 91% of the portion of the Columbia River watershed within the State is located above Bonneville Dam. In Oregon, 98% of that portion of the watershed within the State is located above the "coastal watershed". In both states, 90% of all of the agricultural indicators of nonpoint source pollution examined by NOAA in making its boundary recommendation are located above the coastal watershed. Similarly, in both states, 70% or more of the population of the Columbia watershed resides above the coastal watershed. These figures show that a large number of nonpoint sources are spread out over a very large watershed, and that only a small part of the watershed is included in either the coastal zone or the coastal watershed of either state. These factors make it extremely difficult to determine whether the relatively small portion of polluted runoff generated within the coastal watershed but outside of the states' coastal management boundaries has a significant impact on the coastal waters of the states. Therefore, based on these complicating factors and the March 16, 1995 Flexibility for State Coastal Nonpoint Programs guidance, NOAA and EPA will defer to Oregon's and Washington's statement that the appropriate 6217 boundary is westward of Puget Island and the eastern border of WRIA 25, respectively.

NOAA and EPA recognize that there are other tools that are currently in use or being developed to address nonpoint source pollution outside of the 6217 management area boundary, such as the development of TMDLs for 303(d) listed waters and phase II of the NPDES stormwater permits. However, NOAA and EPA remain concerned that sources outside the management area boundary could contribute to water impairment in the lower Columbia River. Therefore, we expect Oregon and Washington to use all applicable programs to control nonpoint source pollution beyond the 6217 management area in the Lower Columbia coastal watersheds, to monitor water quality, and, if necessary, to take additional steps in the future to address those sources that have a significant impact on coastal water quality.

## II. AGRICULTURAL MANAGEMENT MEASURES

### A. CONFINED ANIMAL FACILITIES (Large and Small Units)

**CONDITION:** Within two years, Oregon will include in its program management measures in conformity with the 6217 (g) guidance for facilities where animals are confined for less than four months and that do not have prepared surfaces or waste water control facilities. Also within two years, Oregon will provide a strategy (in accordance with section XII, pages 19-20) for use of the State's water quality law (ORS 468B) as a back-up enforceable mechanism to ensure implementation of the management measures for confined animal facilities as proposed on pages 48-50 of the State's program submittal.

**FINDING:** Oregon has satisfied this condition.

**RATIONALE:** The Oregon Legislature adopted House Bill (HB) 2156 in 2001, amending ORS 468B to define confined animal feeding operations according to rules established by DEQ and ODA and to require that the definition distinguish between various categories of operations, including those regulated by NPDES permits. The new definition removes the exclusion for CAFOs where animals are confined for less than four months and that do not have prepared surfaces or waste water facilities. OAR 603-074 establishes rules for administering the CAFO program, including enforcement against water quality violations. Since 1999, ODA has conducted annual inspections of permitted CAFOs. Two new CAFO inspector positions have been created for the south and mid-coast CNPCP area. An inspector based in Tillamook will also service the northern portion of the CNPCP area. The state also has a complaint-driven enforcement process and an educational outreach program.

### B. EROSION AND SEDIMENT CONTROL, NUTRIENT, PESTICIDE, GRAZING, AND IRRIGATION WATER MANAGEMENT

**CONDITIONS:** Within one year, Oregon will (1) designate agricultural water quality management areas (AWQMAs) that encompass agricultural lands within the 6217 management area, and (2) complete the wording of the alternative management measure for grazing, consistent with the 6217(g) guidance. Agricultural water quality management area plans (AWQMAPs) will

include management measures in conformity with the 6217(g) guidance, including written plans and equipment calibration as required practices for the nutrient management measure, and a process for identifying practices that will be used to achieve the pesticide management measure. The State will develop a process to incorporate the irrigation water management measure into the overall AWQMAPs. Within five years, AWQMAPs will be in place.

**FINDING:** Oregon has satisfied these conditions.

**RATIONALE:** Oregon has satisfied the conditions for designating AWQMAs [1010 plans]. The State has established seven Agricultural Water Quality Management Areas (AWQMAs) covering its coastal nonpoint program boundary and has developed Agricultural Water Quality Management Area Plans (AWQMAPs) consistent with the (g) guidance for all these areas. All agriculture management measures have been included in the appendices of the coastal 1010 plans, and in some cases the measures have been incorporated directly into the plans.

ODA and DEQ have established a joint process to revise the AWQMAPs every two years. NOAA and EPA encourage Oregon to use this process to insert the agricultural management measures into the body 1010 plans over time and to more closely link 1010 plans with TMDL load allocations. Recommendations in the plans are voluntary. The mandatory part of the program are the rules associated with each plan that specify prohibited conditions related to a few of the recommendations. While ORS 568.900-568.933 and OAR 603-090-0000 through 603-090-0120, do grant ODA the authority to adopt rules necessary to implement the plans and to address water pollution problems where voluntary compliance is not achieved, it is not yet clear whether the biennial plan and rule revision process will link enforcement capability to the management measures as needed to meet water quality goals. NOAA and EPA strongly encourage DEQ and ODA to do a thorough sufficiency analysis every two years and revise the plan and rules accordingly. Also NOAA and EPA are concerned that, in actuality, the State does not always take enforcement action when needed. Therefore, NOAA and EPA also strongly encourage ODA to take a more active enforcement role to ensure the 1010 plans and (g) measures are being implemented as designed. A Memorandum of Agreement between DEQ and ODA memorializes coordination efforts addressing TMDLs for water quality limited water bodies and 1010 plans. The MOA includes a commitment by ODA to modify 1010 plans to address the AWQMAPs. In fact, TMDL load allocations. The MOA potentially ensures that ODA will evaluate 1010 plans to assure attainment of DEQ's load allocation for agriculture. By including the (g) measures in the appendix of 1010 plans, enforceable under ORS 568.900-568.933, Oregon has demonstrated the AWQMAPs will include measures in conformity with the 6217 guidance.

The State also has specific programs for nutrient management and irrigation that provide additional support for the 1010 plans. Nutrient management plans, consistent with the (g) guidance, are required under all new or expanded CAFO permits (Oregon Confined Animal Feeding Operation General Permit Number 01, May 2003 draft, in compliance with the provisions of Oregon Revised Statutes (ORS) Chapter 468B, Oregon Administrative Rules (OAR) Chapter 603, Division 74, The Federal Water Pollution Control Act as amended (The Clean Water Act)

Title 33 United States Code, Section 1251 et seq., and the National Pollutant Discharge Elimination System (NPDES)) under the CAFO laws and rules, ODA has the authority to require nutrient management plans as part of compliance orders they issue to correct nutrient or waste load violations. The Water Resources Department's (WRD) Water Use Basin Programs codified in OAR Chapter 690 support the irrigation measure by establishing sub-basin classifications and limits on water use. NOAA and EPA encourage the ODA and DEQ to improve their coordination with WRD to ensure implementation of the 6217 irrigation measures. Oregon State University has also developed Western Oregon Irrigation Guides which include information on timing, measuring soil-water depletion and application rates.

Finally, the State has completed the wording of the alternative management measure for grazing by including language consistent with the (g) measure as recommended practices in the appendix of all AWQMAPs as noted above.

Even though AWQMAPs are developed on a watershed scale and cover the entire 6217 boundary, NOAA and EPA are concerned that, since the impetus for the AWQMAP planning process is driven by TMDLs, people may assume that measures need only to be implemented in specific areas where water quality is degraded. Site-specific implementation triggered by degradation rather than implementation across the landscape, would not meet the 6217 goals of pollution prevention. Also, if a specific parameter is not listed on the 303(d) list, the AWQMAP may not include the related management measure, even though the measure is included in the appendix. Therefore, NOAA and EPA encourage the state to take a holistic, pollution prevention approach when upgrading their 1010 plans to incorporate all agricultural management measures and ensure the plans are being implemented properly throughout the 6217 area.

## III. URBAN

### A. NEW DEVELOPMENT, SITE DEVELOPMENT, CONSTRUCTION SITE EROSION AND SEDIMENT, AND CHEMICAL CONTROL

**CONDITION:** Within two years, Oregon will include in its program management measures in conformity with the 6217(g) guidance and enforceable policies and mechanisms to ensure implementation throughout the 6217 management area.

**January 13, 2004 FINDING:**

- The state is exempt from the Construction Site Erosion and Sediment Control and Construction Site Chemical Control measures throughout the 6217 boundary. These measures are now covered under the NPDES Phase I and II Stormwater Program.

**June 25, 2008 FINDING:**

- Outside of Phase I and II designated areas, Oregon has not satisfied the management measure component of the New Development management measure
- Oregon has demonstrate it has enforceable policies and mechanism in place to ensure

implementation of the new and site development measures throughout the 6217 boundary.

**RATIONALE:** To address the new development measure outside of designated NPDES Phase I and II stormwater areas, Oregon has proposed relying on its TMDL implementation strategy. NOAA and EPA had previously agreed this could be a plausible approach given that TMDLs have wide geographic coverage in Oregon and that almost all communities within the 6217 management area must meet load allocations for sediment. However, the state needed to finalize the TMDL Implementation Plan Guidance so that it would include specific recommendations consistent with the (g) guidance for new development. The outline of the guidance document that EPA and NOAA reviewed in 2003 was very promising, including references to "no net increases of off-site run off."

NOAA and EPA were discouraged to find that the final TMDL Implementation Plan Guidance provided in the recent submittal does not contain any specific recommendations that are consistent with the (g) guidance for new development. The guidance document does not even recommend plan developers consult the 6217(g) guidance when developing TMDL Implementation Plans within the 6217 boundary. Since specific recommendations to incorporate the new development measure are not included in the guidance, there is no guarantee that Implementation Plans developed would reduce TSS by 80% or maintain post-development peak runoff rates to pre-development levels to the maximum extent practicable as per the new development measure. Based on the two completed implementation plans Oregon provided, all plans are not being developed to a level consistent with the (g) guidance for new development. The Curry County Plan does reference its new stormwater ordinance, which requires reducing the amount of post-development runoff consistent with the (g) guidance as well as provides best management practice standards that could reduce total suspended solids per (g) guidance requirements. However, the Jackson County Plan merely mentions "evaluating the potential for requiring erosion control permits and inspections for construction activities < 1 acre of soil disturbance," which does not address the new development requirements. While initially promising, it does not appear that the State's current TMDL approach will enable Oregon to satisfy the new development requirements for the 6217 (g) measures.

NOAA and EPA are encouraged to hear that DEQ is in the process of drafting new TMDL Implementation Guidance specifically for coastal urban areas, which will include specific recommendations consistent with the (g) guidance for new development. We strongly encourage the state to move forward with this revision and would be happy to review drafts of the guidance to ensure that it would meet new development requirements for the Coastal Nonpoint Program.

While we understand the updated TMDL Implementation guidance may take a couple of years to finalize, Oregon may be able to peruse other avenues for meeting the new development condition in a shorter timeframe. Developing a voluntary program based on its Water Quality Model Code and Guidebook (see discussion below) could be one option. Another option could be to show that a significant number of counties/local governments within the 6217 boundary have developed stormwater ordinances that are consistent with the (g) guidance. Although Portland is not in the

6217 boundary, the Low Impact Development (LID), stormwater, CSO control policies and approaches the City has implemented provide a good model for policies that could be adopted within the boundary area to meet the new development management measure. NOAA and EPA encourage Oregon to use the Portland experience to speed adoption of LID throughout its 6217 management area.

The State may also want to explore opportunities to require any projects that receive state funding to be consistent with the new development management measure. Federal agencies are already required to implement Section 438 of the Energy Independence and Security Act of 2007, which stipulates that, "The sponsor of any development redevelopment project involving a Federal facility with a footprint that exceeds 5,000 square feet shall use site planning, design, construction, and maintenance strategies for the property to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume, and duration of flow." State adoption and implementation of this provision or a similar policy would help the state further implement the new development measure when state funding is involved.

Regarding the site development measure, Oregon has described a number of programs that, when combined, enable the state to satisfy this condition including its NPDES General Permit for Construction Activities, State Land Use Goals, and Water Quality Model Code and Guidebook.

All activities that disturb more than an acre of land must receive a NPDES General Permit for Construction Activities. The General Permit includes, as additional control practices which must be developed if appropriate to the site, recommendations to minimize the area of disturbance and requires the permittee to describe practices that will protect existing vegetation.

State Land Use Goals 5, 6, and 7 can also protect areas that provide water quality benefits, limit disturbance of natural drainage features, minimize impervious surfaces, and limit clearing and grading within identified significant natural resource areas. State law requires reach city and county to adopt a comprehensive plan and the zoning and land-division ordinances needed to put the plan into effect. The local comprehensive plans must be consistent with the statewide planning goals.

The Water Quality Model Code and Guidebook, a voluntary guidance manual, includes guidelines and examples that are consistent with the (g) guidance for site development such as limiting impervious surface, retaining natural vegetation, protecting areas that provide important water quality benefits, and limiting disturbance of natural drainage features. According to a January 2001 hardcopy edition that NOAA and EPA reviewed, the guidebook also includes many practices that are consistent with the (g) guidance for new development. However, the October 2001 version that is available online is missing the critical stormwater plan section that establishes guidelines and best management practices that should be incorporated into a stormwater plan to reduce total suspended solids. While Oregon did actively promote the guidebook to local planners when it was first released in 2001, the federal partners are unclear if the state continues to

work with planners to make sure they are aware of and using the guidebook as designed, especially since critical information that is needed to help satisfy the new development measure is missing from the online version. Without additional information about how the state is actively promoting and tracking its use, NOAA and EPA do not feel that the voluntary guidebook would be acceptable for meeting the new development condition by itself.

NOAA and EPA understand that the state is currently updating the Model Code and Guidebook. The state anticipates distributing it to city and county planning directors via CD and the web this spring/summer. NOAA and EPA look forward to reviewing the updated document. In addition to distributing the document to local planners and announcing the new release at a statewide planning conference, we strongly encourage the state to take a more proactive approach to educating and training local planners and other decision makers about the guidebook.

Per the *1998 Final Administration Changes Memo,* states can use voluntary approaches such as the guidebook to satisfy the (g) measures if they provide: (1) a legal opinion; (2) a description of the voluntary programs the state will use to encourage management measure implementation, including methods for tracking and evaluating those programs; and (3) a description of the mechanism or process that links the implementing agency with the enforcement agency. The state has submitted a legal opinion from its Attorney General demonstrating Oregon has the necessary back-up authority through its Water Quality Statutes (ORS 468B et. seq.) to require implementation of both the new and site development management measures. The legal opinion also describes the link between the implementing and enforcing agencies. The updated voluntary Water Quality Model Code and Guidebook, coupled with an active outreach/training program, perhaps through partnerships with Sea Grant or the South Slough National Estuarine Research Reserve's Coastal Training Program, and a tracking component to ensure adequate implementation of model code adoption across the coastal nonpoint management area would satisfy the second element. To ensure adequate implementation of model code adoption, Oregon should establish targets for the number of communities or percent of population in the 6217 management area consistent with this goal. Of course, this assumes the updated guidebook is still consistent with the (g) guidance for new development.

Finally, effective December 20, 2002, NOAA and EPA have determined that states are exempt from the construction site erosion and sediment control and construction site chemical 6217(g) management measure requirements. These activities are covered through the National Pollution Discharge Elimination System (NPDES) Phase I and II stormwater permit program throughout the 6217 management area.

## B. WATERSHED PROTECTION AND EXISTING DEVELOPMENT

**CONDITION:** Within three years, Oregon will further develop its program to implement the management measures for watershed protection and existing development in conformity with the 6217(g) guidance throughout the 6217 management area.

**January 13, 2004 FINDING:** Oregon has satisfied this condition.

**RATIONALE:** Do not have e-copy.

**C. NEW AND OPERATING ONSITE DISPOSAL SYSTEMS**

**CONDITION:** Within two years, Oregon will finalize its proposal to inspect operating OSDS, as proposed on page 143 of its program submittal.

**June 25, 2008 FINDING:** Oregon has not satisfied this condition.

**RATIONALE:** Oregon has demonstrated that it has an adequate and very strong inspection program for alternative treatment systems and has a viable inspection system for responding to complaints, although NOAA and EPA would like clarification on how the State determines what constitutes a "high priority complaint." However, Oregon still lacks an adequate inspection program to proactively inspect conventional septic systems throughout its coastal nonpoint management area.

NOAA and EPA note that DEQ may still pursue rule changes to require regular inspections of existing OSDS. While we encourage the state to continue to seek a rule change, we also recognize that this may take a long time and can be politically challenging to achieve.

Outside of a rule change, NOAA and EPA appreciate the state's focus on encouraging point-of-sale inspections and the effort it has put into the program so far. For the voluntary approach to be approved, the following deficiencies need to be addressed:

1) The 85% goal is "tentative" and tracking is not sufficiently robust. There should be a solid back-up plan that kicks into place if early tracking efforts reveal that the 85% goal is not attainable under the proposed strategy. NOAA and EPA recommend that a statistically valid survey of real estate agents, brokers, and/or lenders be conducted at a maximum of 5-year intervals, in keeping with the program's three 5-year plans over the 15-year implementation period. Interim milestones for each surveyed interval should be established.
2) Sufficient resources should be in place to ensure that the interim milestones and final 85% goal are realistic and attainable during each 5-year plan period and 15-year program implementation period. NOAA and EPA recommend that a minimum of $100,000 be set aside each year to address this condition, under the State's section 319 allocation bundled into its performance partnership grant.
3) NOAA and EPA encourage Oregon to have OSDS inspections be conducted by inspectors who are certified through a nationally recognized inspector-training program that relies on standardized criteria and protocol. While NOAA and EPA recommend this as a required element of Oregon's voluntary inspections strategy, short of this, a robust incentive-based approach toward using certified inspectors is also acceptable.

## D. ROADS, HIGHWAYS, AND BRIDGES

**CONDITION:** Within two years, Oregon will (1) develop management measures in conformity with the 6217 (g) guidance for construction site chemical control; (2) develop enforceable policies and mechanisms to implement the roads, highways and bridges measures on all federal and State highways throughout the 6217 management area; (3) develop management measures in conformity with the 6217 (g) guidance and enforceable policies and mechanisms for local roads, highways, and bridges throughout the 6217 management area; and (4) provide a strategy (in accordance with section XII, pages 19-20) for use of the State's water quality law (ORS 468B) as a back-up enforceable mechanism to ensure implementation of the management measures for operation and maintenance and for runoff systems, as proposed on pages 155 and 157 of the State's program submittal.

**June 25, 2008 FINDING:** Oregon has satisfied these conditions.

**RATIONALE:** Effective December 20, 2002, NOAA and EPA have determined that designated MS4 areas are no longer subject to the Road, Highway and Bridge requirements of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA) Section 6217 Coastal Nonpoint Pollution Control Program due to their coverage in the National Pollution Discharge Elimination System (NPDES) stormwater permit program (Phase I and II). In addition, state coastal nonpoint control programs are no longer required to include the Construction Projects and Construction Site Chemical Control Management Measures throughout the 6217 boundary because the NPDES stormwater regulations for industrial activities on construction sites apply nationwide and therefore throughout the coastal management areas of states and territories.

Outside of MS4 areas, ODOT's Phase I Stormwater NPDES MS4 General Permit enables the state to satisfy the remaining roads, highways and bridges conditions for state and federal roadways. For local roads, Oregon uses a voluntary approach backed by enforceable authorities. The state encourages local governments to follow ODOT's maintenance and construction manuals which are consistent with the (g) guidance and holds training sessions that many local government road crews attend to learn about best management practices for road construction and maintenance. For example, in February 2001, ODOT sent a letter to all local governments, recommending they use the department's manuals.

The DEQ's TMDL Implementation Plan guidance further promotes ODOT's manuals for use by local governments as a way of addressing water quality impairments (see sample Management Plan and Existing Plan Checklists for Willamette). Completed TMDL Implementation Plans for Jackson and Curry Counties demonstrate that counties are adopting ODOT's manuals to reduce polluted runoff from road siting and maintenance activities.

The Oregon Watershed Enhancement Board provides funding for a variety of watershed

enhancement activities, including improvements to existing roads, highways and bridges to reduce polluted runoff. In the most recent summary report, nearly $30M of OWEB funds went to road improvements statewide during FY 2002 and 2003. The state estimates that one third of those funds were spent within the 6217 management area.

Oregon has submitted a legal opinion from its Attorney General pursuant to the *1998 Final Administration Changes Memo* to demonstrate it has the necessary back-up authority through its Water Quality Statutes (ORS 468B et. seq.) to require implementation of the voluntary elements of the road, highway and bridges management measures.

## IV. MARINAS

### A. MARINA FLUSHING, WATER QUALITY, and HABITAT ASSESSMENT

**CONDITION:** Within three years, Oregon will include in its program enforceable policies and mechanisms to implement the marina flushing and habitat assessment management measures throughout the 6217 management area.

**June 25, 2008 FINDING:** Oregon has satisfied this condition.

**RATIONALE:** New or expanded marinas require a removal-fill permit from the Division of State Lands (DSL). The review process for these permits enables DSL to implement both the marina flushing and habitat assessment management measures. DSL developed a permit review checklist in 2004, to guide permit reviewers in what they should be looking for when reviewing marina permit applications. The checklist includes marina flushing and recommends (g) guidance best management practices for flushing to achieve adequate water quality. To address habitat issues, DSL permit reviewers must condition the permits to "avoid or minimize impacts to fish and wildlife resources" when conducting in-water or shoreline work (141-085-0029(7)(c)).

In addition to DSL's direct review, Oregon's Department of Fish and Wildlife (ODFW) also reviews marina applications under the removal-fill law (ORS 196.795-990) to advise DSL on its permit decisions. ODFW has three policy standards (#14304, #14309, and #14310) consistent with the (g) guidance for flushing to guide their permit evaluations.

In estuarine areas, the habitat assessment measure is also supported by the State's Land Use Goal 16 (OAR 660-015-0010(1)) which provides the State with enforceable policies and mechanisms to implement the habitat assessment measure in the estuarine areas of the 6217 boundary. Goal 16 requires all local jurisdictions in the coastal zone to evaluate estuaries and identify appropriate locations for water dependent uses, including marinas. The existing natural condition and function of the estuary must be considered during the evaluation process. Specifically marinas are prohibited in areas with "natural" designations. Natural areas, at a minimum, must contain all major tracts of saltmarsh, tideflats and seagrass beds.

**B. SHORELINE STABILIZATION, STORMWATER RUNOFF, FUELING STATION DESIGN, SOLID WASTE MANAGEMENT, LIQUID MATERIAL MANAGEMENT, and PETROLEUM CONTROL**

**CONDITION:** Within three years, Oregon will develop management measures in conformity with the 6217(g) guidance and enforceable policies and mechanisms to ensure implementation of these management measures throughout the 6217 management area.

**February 17, 2004 FINDING:** Oregon has satisfied this condition.

**RATIONALE:** Do not have e-copy.

**C. SEWAGE FACILITY MANAGEMENT and MAINTENANCE**

**CONDITION:** Within three years, Oregon will include in its program enforceable policies and mechanisms to ensure implementation of these management measures throughout the 6217 management area.

**February 17, 2004 FINDING:** Oregon has satisfied this condition.

**RATIONALE:** Do not have e-copy.

**D. FISH WASTE and BOAT CLEANING**

**CONDITION:** Within three years, Oregon will issue an NPDES general permit for fish waste management, which will apply to all facilities identified in the 6217(g) guidance.

**February 17, 2004 FINDING:** Oregon has satisfied this condition.

**RATIONALE:** Do not have e-copy.

**E. BOAT OPERATION**

**CONDITION:** Within three years, Oregon will include management measures in conformity with the 6217(g) guidance.

**February 17, 2004 FINDING:** Oregon has satisfied this condition.

**RATIONALE:** Do not have e-copy.

**V. <u>HYDROMODIFICATION</u>**

**CONDITION:** Within two years, Oregon will develop processes to identify and implement opportunities to (1) improve the physical and chemical characteristics of surface waters and

instream and riparian habitat in existing modified channels and (2) stabilize eroding streambanks or shorelines causing nonpoint problems that are not reviewed under existing authorities. Also within two years, Oregon will include in its program the dam management measures for chemical and pollutant control and protection of surface water quality and instream and riparian habitat in conformity with the (g) guidance. Within three years, Oregon will also either modify the exemptions to the removal-fill program or demonstrate that the exemptions do not preclude the State from fully implementing the management measures.

**FINDING:** Oregon has satisfied these conditions.

**RATIONALE:** Oregon, through a number of related restoration and protection initiatives, has developed a process to identify and implement opportunities to improve the physical and chemical characteristics of surface water in existing modified channels. Oregon has also developed a process to identify opportunities to restore instream and riparian habitat. Key components include: the Oregon Plan for Salmon and Watersheds, a framework for anadromous fish recovery which fosters local watershed council work to assess and restore watersheds; the Healthy Streams Partnership; the Oregon Watershed Enhancement Board, which funds riparian restoration projects, including stream habitat enhancement and restoration of previously altered stream reaches; the Oregon Aquatic Habitat Restoration and Enhancement Guide, which provides guidance on identifying and conducting restoration activities and state agency criteria and priorities for restoration; riparian management components of Agriculture Water Quality Management Area Plans; and Oregon's Statewide Riparian Management Policy.

In addition, in May of 2002, the Governor's Office published a progressive "Statewide Riparian Management Policy" that states "State agency programs that affect riparian zones should seek to manage for riparian functions as much as possible along the entire stream system, consistent with regional ecology, site capability, and social and economic needs." Among the riparian functions listed are filtration of sediments, organic material, and toxic substances in surface runoff.

Eroding stream banks in the 6217 management area are primarily due to forestry and agricultural practices which result in the removal of vegetation from riparian areas. The opportunities for riparian corridor restoration identified via the watershed assessments, Oregon Aquatic Habitat Restoration and Enhancement Guide, and the activities of the Riparian Management Working Group, will help to address the effects of vegetation removal on eroding stream banks. In addition, ODA and ODF have entered into a Memorandum of Understanding with DEQ relating to the development of TMDLs and Agriculture Water Quality Management Area Plans (AWQMAPs), both mechanisms for addressing eroding streambanks. Finally, the State is encouraging the use of bioengineering techniques in bank stabilization projects undertaken by property owners. These projects must be reviewed and permitted by DSL and receive section 401 Water Quality Certification by DEQ. Both authorities have guidelines which favor the use of bioengineering techniques in stabilization projects.

The Oregon Water Resources Department (OWRD) reviews all dam construction, operation, and

maintenance activities. Under OAR 690, Division 310 OWRD must determine whether the proposed surface water use will impair or detrimentally affect the public interest. OWRD can then condition dam construction, operation and maintenance activities through its review of permits for water appropriations to protect surface water quality, and instream and riparian habitat. OAR 690-31–0120(3)(b) defines minimum factors to be considered for new appropriations, including "water quality, with special attention to sources either listed as water quality limited or for which total maximum daily loads have been set . . . and sources which the Environmental Quality Commission has classified as outstanding resource waters." OAR 690, Division 33 establishes additional public interest standards with regard to sensitive, threatened, or endangered fish species, and requires OWRD to follow recommendations of an interagency review team comprising representatives of ODA, DEQ, ODFW, OWRD, and other state natural resource agencies as appropriate.

When conditioning a permit, OWRD draws from a list of standard conditions. Several conditions address dam construction, operation and maintenance activities, including withdrawals, fish habitat, sediment, and downstream water quality. OWRD has demonstrated is can and does condition dam construction, operation and maintenance activities through its water appropriations permit review process to protect surface water quality, and instream and riparian habitats consistent with the (g) guidance.

EPA and NOAA have determined that, effective December 20, 2002, state coastal nonpoint control programs are no longer required to include the dam management measure for chemical and pollutant control in their Coastal Nonpoint Pollution Control Programs because the NPDES storm water regulations for industrial activities on construction sites apply nationwide and therefore throughout the coastal management areas of states and territories.

Previously, removal and fill activities involving 50 cubic yards or less of material that were not located within essential fish habitat were exempt from the removal fill laws (OAR 141.085). The rule also limited the Department of Fish and Wildlife (ODFW) from designating more then 20% of any stream as essential fish habitat. Division 102 of the OAR has since been amended to expand the essential fish habitat classification. Now 75-80% all waterbodies in the 6217 management area are designated essential habitat, thus removing the 50 cubic yard exemption for removal and fill activities.

In December 2002, the Division of State Lands amended the removal and fill administrative rules (OAR 141.085) to make Oregon's laws consistent with the federal 404 permit exemptions and more clearly define exempt maintenance and reconstruction activities and exempt farm and forest practices. The state has demonstrated that these minor exemptions will not have a significant impact on surface water quality or impact the state's ability to implement the (g) measures. First of all, the state's main strategy for implementing the maintenance aspects of the channelization/ channel modification and eroding stream banks management measures is no longer the removal-fill regulations. The state is now relying on a variety of programs such as Oregon's Watershed Enhancement Board grants program, the Oregon Aquatic Habitat and Restoration

Enhancement Guide, and the Agriculture Water Quality Management Area Plans (see above hydromodification sections for more details). In addition, the state has also demonstrated that (g) measure requirements for dam maintenance are addressed through Oregon's Water Resources Department permit program (see dam management measures for more in-depth discussion.)

## VI. WETLANDS, RIPARIAN AREAS, AND VEGETATED TREATMENT SYSTEMS

**CONDITION:** Within two years, Oregon will include in its program management measures in conformity with the 6217 (g) guidance to assure the protection of riparian areas. The State will also develop a process to promote the restoration of riparian areas in conformity with the 6217 (g) guidance.

**June 25, 2008 FINDING:** Oregon has satisfied this condition.

**RATIONALE:** Oregon preserves riparian areas under State Land Use Goal 5. The goal requires local governments to inventory natural resources, including riparian areas, and adopt programs that will preserve significant riparian areas. Local governments can elect to use the "safe harbor" criteria (a streamlined designation process) or the more detailed standard Goal 5 process to identify significant riparian areas. Under the "safe harbor" process, all riparian corridors adjacent to fish bearing streams and lakes are considered significant riparian resources. Local governments must pass ordinances to establish either a 75 or 50 foot riparian protection zone depending on the size of the waterbody. Development, vegetation removal and impervious surfaces are generally prohibited within these protection zones. Exemptions are only granted if equal or better protection for riparian resources is provided through riparian restoration or enhanced buffer treatment.

Under the standard Goal 5 process, local governments are required to conduct a comprehensive inventory of their riparian areas to identify significant riparian resources. The significance of each riparian area must be justifiable based on findings derived from the inventory. The DLCD reviews the inventories to determine they are adequate. The standard process acknowledges that local governments do have to manage other priority land uses that may conflict with riparian protection. Nonetheless, they are still required to establish an effective management strategy for riparian resource protection.

All cities with a population greater than 2,500 and all counties with a population greater then 15,000 must also periodically update their comprehensive plans. All counties within the 6217 management area are required to undergo these periodic reviews. At this time, they must conduct new inventories of significant riparian resources and ensure they have programs in place to protect Goal 5 resources.

Oregon has also supported riparian protection through OWEB funded projects. According to the 2007 Report to Congress on the Pacific Coastal Salmon Recovery Funds, over $5 million in OWEB funding has helped acquire and permanently protect water quality and fisheries habitat on

over 2,300 acres of critical, ecologically significant areas within Oregon's coastal basins.

Agriculture and forestry activities are exempt from Goal 5 requirements; however, riparian protection involving these activities is addressed directly through SB1010 plans (agriculture) and the Forest Practices Act (FPA) (forestry). For example, as described earlier under the Agriculture Management Measures section, agriculture water quality management areas (AWQMAs) have developed management plans (SB1010 plans) and administrative rules consistent with the (g) guidance for the agricultural measures which includes practices to protect sensitive areas such as riparian zones. The administrative rules also state that riparian management should be conducted to allow for the establishment, growth and maintenance of riparian vegetation.

Oregon's TMDL program can also play an important role in riparian protection. All the basins within the 6217 boundary have water quality impairments for temperature. To address this impairment, each designated management agency (DMA) within the listed sub-basins must develop TMDL Implementation Plans for temperature. Riparian protection and restoration are important components for reducing temperature impairments as riparian areas provide needed shading to waterways. Several TMDL Implementation Plans that have been completed are consist with the (g) guidance for riparian protection. However, since the TMDL Implementation Plan guidance does not recommend specific riparian protection practices to address temperature impairments or even reference the (g) guidance, there is no guarantee that all subsequent TMDL Implementation Plans would be consistent with the (g) guidance for riparian protection. NOAA and EPA strongly encourage Oregon to consider revising the TMDL Implementation Plan guidance to, at a minimum, require DMAs within the 6217 management area to consult the (g) guidance and incorporate practices consistent with the (g) guidance as appropriate, when developing Implementation Plans.

In the conditional findings on Oregon's Coastal Nonpoint Program, NOAA and EPA stated concern that forest land riparian areas were not being protected when the land was converted to another use under existing programs. In 2006, Oregon finalized a Memorandum of Agreement (MOA) between the Departments of Forestry, Agriculture, State Lands, Fish and Wildlife, Parks and Recreation, Land Conservation and Development, and Environmental Quality to address this issue. The MOA clearly establishes a process for notifying all signatory agencies when forest land is converted to other uses so that each agency can ensure that its responsibilities in protecting water quality and riparian areas will be carried out. The landowner/operator must submit a Plan for an Alternative Practice to ODF that addresses potential water quality or natural resource impacts of the proposed alternative practice. ODF then shares the plan with the other agencies for review. No conversion activity will be approved unless it complies with the resource protection rules of the appropriate state agency(ies) that have jurisdiction over the new activity.

## VII. ADMINISTRATIVE COORDINATION

**CONDITION:** Within one year, Oregon will establish a process for ensuring coordination among State and local agencies with a role in the implementation of the coastal nonpoint program.

**April 2004 FINDING:** Oregon has satisfied this condition.

**RATIONALE:** Oregon has established a process for ensuring coordination among State and local agencies to implement the coastal nonpoint program by developing formal coordination mechanisms such as memorandum of understanding, advisory boards, agency outreach to local municipalities, and having regular informal communication among parties responsible for the program.

The Department of Environmental Quality (DEQ) has signed separate Memorandums of Understanding (MOUs) with the Oregon Department of Agriculture (ODA) and the Oregon Department of Forestry (ODF) to outline agency roles in developing and revising agricultural 1010 Plans and TMDLs for forestry, respectively. Several state agencies including DEQ, ODF, the Oregon Department of Water Resources, and the Department of Fish and Wildlife, have also signed an MOU to provide for continued cooperation to achieve the goals of the Oregon Plan for Salmon and Watersheds, many aspects of which address 6217 (g) measures.

The Community Solutions Team Advisory Board is comprised of several state agencies including the DEQ, ODF, the Department of Land Conservation and Development (DLCD) and the Department of Transportation. The Advisory Board coordinates local development issues including many topics relevant to the coastal nonpoint program such as TMDLs and land use laws.

Oregon's Coastal Management Program also conducts regular outreach to local governments within the coastal zone. Discussions include development and implementation of the coastal nonpoint program.

Finally, agency staff involved in the coastal nonpoint program regularly communicate with one another through informal channels. Both DEQ and DLCD have staff dedicated to the coastal nonpoint program and these individuals work with appropriate people at the other state and local agencies as needed to develop and implement the coastal nonpoint program. NOAA and EPA encourage DLCD and DEQ, as the lead state agencies for the coastal nonpoint program, to continue coordination efforts with other state and local government agencies. In particular, they should proactively involve partner agencies such as the Department of Forestry and Department of Health in order to meet the state's remaining conditions and implement the coastal nonpoint program throughout the 6217 management area.

## VIII. CRITICAL COASTAL AREAS, ADDITIONAL MANAGEMENT MEASURES AND TECHNICAL ASSISTANCE

**CONDITION**: Within two years, Oregon will identify and begin applying additional management measures where water quality impairments and degradation of beneficial uses attributable to forestry exist despite implementation of the (g) measures. Within two years, Oregon will develop a process for the identification of critical coastal areas and a process for developing and revising

management measures to be applied in critical coastal areas and in areas where necessary to attain and maintain water quality standards. Also within two years, the State will develop a program to provide technical assistance in the implementation of additional management measures.

**April 2004 FINDING:**

- Oregon has developed a process to identify critical coastal areas and a process to develop and revise management measures to be applied in critical coastal areas and in areas where necessary to attain water quality standards.
- Oregon has developed a program to provide technical assistance in the implementation of additional management measures.
- Oregon has not satisfied the condition for additional management measures for forestry.

**RATIONALE:** Oregon has described a process for identifying critical coastal areas that considers the factors recommended in the NOAA/EPA *1993 Program Development and Approval Guidance.* Statewide Planning Goal 16, Estuarine Resources (OAR 660-015-0010(1)) recognizes the importance of protecting Oregon's estuaries where new or substantially expanding uses could cause or contribute to water quality impairment. Goal 16 requires classification of Oregon's estuaries into one of four types–natural, conservation, shallow draft development, or deep draft development. The estuary areas are further divided into "distinct water use management units" which define the permissible uses within each unit. In estuaries classified as natural or conservation, only activities which support these designations are allowed. Therefore, Goal 16 is an appropriate vehicle for identifying critical coastal areas in estuaries.

In addition, the OWEB watershed assessment protocol lays out a process to identify and map areas within watersheds that are in need of protection. Such a process is a good vehicle to identify critical coastal areas in the coastal watersheds. The watershed assessments are used to develop restoration and enhancement plans and prioritize projects within each watershed.

TMDLs and their associated implementation plans can also identify critical areas for special attention. Oregon requires that TMDLs developed for impaired watersheds be accompanied by water quality management plans (WQMP) that specify load reductions, a schedule for meeting load reductions, and management authorities responsible for achieving the load reduction. It is anticipated that all watersheds in the 6217 management area will have TMDLs completed by 2006.

NOAA and EPA have determined that Oregon has satisfactorily developed a program to provide technical assistance. As described in the October 2002 submittal, Oregon has a number of on-going grant programs, publications, and workshops that provide technical assistance to support implementation of additional management measures. The State has adequately described the type of technical assistance provided (grants, technical assistance documents, training workshops); the agencies providing the technical assistance (DLCD, DEQ, OWEB, ODF); the intended recipients (coastal jurisdictions, watershed councils, individual land owners, forest operators); and a schedule of availability as required in the *Coastal Nonpoint Pollution Control Program: Program Development and Approval Guidance* (NOAA and EPA, January 1993).

**Additional Management Measures for Forestry (June 25, 2008)**

Based on Oregon's recent submittal and our understanding of Oregon's Forestry Program, EPA and NOAA still believe that Oregon lacks adequate management measures under the Oregon Forest Practices Act (FPA) rules for protecting water quality and the degradation of beneficial uses from forestry activities. EPA and NOAA's primary concerns, stated in the 1998 conditional findings and reiterated in the 2004 interim decision document, remain. Oregon still lacks adequate measures for protecting riparian areas of medium, small and non-fish bearing streams, high risk landslide areas, and for addressing the impacts of legacy roads. A broad body of science continues to demonstrate that the FPA rules do not adequately protect water quality.

NOAA and EPA support Board of Forestry (BOF) improvements to general road maintenance measures that require a better drainage network for water quality purposes (OAR 629-625-0330) and establish wet weather use requirements/restrictions (OAR 629-625-0700). These two measures, as well as the other improvements described in the submittal, should help reduce road related sedimentation. However, we remain concerned that a significant percentage of the road network on forest lands in Oregon continues to deliver sediment directly into streams, and that new drainage requirements are triggered only when road construction or reconstruction takes place. It is not clear how the rules address water quality impairment associated with legacy roads and a large portion of the existing road network where construction/reconstruction is not proposed. We recommend adoption of a road mapping and abandonment program that creates a requirement and timeline for addressing all active and legacy roads to ensure that water quality is protected. The road provisions in the Washington Forests and Fish Rules are examples that EPA and NOAA believe adequately address roads related water quality protection.

NOAA and EPA also support several recent FPA management measures adopted by the Oregon Board of Forestry (BOF) related to riparian management area requirements. Additional FPA management measures have been adopted to require increased riparian protection upstream from man-made fish barriers (OAR 629-635-0200(13)) and for substituting upland leave trees in riparian management areas along landslide prone non-fish streams (OAR 629-640-0210) likely to deliver wood to fish bearing streams. While these additional measures are an improvement over existing rules, they are not adequate to meet water quality standards or to ensure that beneficial uses such as domestic water supply and salmonid spawning and rearing will be protected. There is a substantial body of assessment and research that have identified the need for increased riparian protection beyond levels provided by the Oregon FPA.

Finally, NOAA and EPA note that there have been amendments to the Oregon Administrative Rules (OAR 629-623-0000 to 08000) to require identification of landslide hazard areas in stewardship plans, and during road construction and maintenance. Timber harvest and road construction are not allowed on sites with "substantial downslope public safety risk." While this rule change is a step in the right direction and helps to protect a subset of high risk landslide areas, hazards are defined only as they relate to risk for loss of life and property. The majority of small streams and landslide prone areas on private forest lands in Oregon still do not receive adequate

protection under the FPA rules. In order to protect water quality, NOAA and EPA strongly encourage Oregon to expand timber harvest and road construction management measures to apply to the high risk landslide areas that can deliver sediment to streams, lakes, and wetlands, not just to areas where property or human life are threatened.

The Oregon Forest Practice Rules and Statutes include best management practices to maintain water quality (ORS 527.765). Part (2) of this section requires the Board of Forestry (BOF) to consult with the Environmental Quality Commission, which is responsible for establishing the policies for the operation of the Department of Environmental Quality, including its water quality programs, as they adopt and review BMPs to address nonpoint source discharges from forest operations. The EQC can petition the Board of Forestry to initiate a "Basin Rule" change review to address inadequacies in the FPA management measures that are contributing to violations of water quality standards (ORS 527.765(3)(d)). The BOF cannot terminate the Basin Rule change review without the concurrence of the EQC. The Basin Rule change provisions that have been in place since 1994 have not been utilized by the EQC. We encourage the EQC to begin utilizing the Basin Rule change provisions where inadequacies in the Oregon FPA contribute to water quality impairment.

EPA and NOAA recognize the extensive voluntary protection and restoration efforts on forestry lands to improve water quality and protect riparian areas. NOAA and EPA continue to strongly support these voluntary efforts. However, the lack of adequate forestry management measures for riparian and landslide prone areas affects a substantial portion of the coastal zone, where 50% to 80% of the stream network in steep, forested watersheds consists of small streams that receive very limited protection. In addition to having direct adverse impacts to water quality, existing forestry practices have indirect adverse effects on the voluntary conservation and restoration efforts of local watershed groups. For example, the benefits of voluntary efforts to remove barriers to fish to allow access to upstream spawning and rearing habitats are offset when forestry practices along upstream reaches degrade riparian habitats and water quality.

While we acknowledge Oregon's extensive voluntary efforts, and its incremental progress on the regulatory front, NOAA and EPA do not believe the progress made is adequate to address the additional management measures for forestry condition on Oregon's Coastal Nonpoint Program. Both Federal agencies continue to believe that additional revisions to Oregon's FPA rules are needed to fully protect water quality and beneficial uses. NOAA and EPA urge the State to move forward expeditiously to adopt and implement additional management measures, either through application of basin specific rules or statewide changes to the FPA and OARs. By adequately addressing our riparian, road and land slide concerns throughout coastal watersheds, Oregon will have sufficient measures in place to address cumulative impacts from forestry as well. If Oregon still wishes to pursue a voluntary approach, backed by enforceable authorities, to address this condition, it must provide more specific information related to funding and project accomplishments on forestry lands within the 6217 management boundary and associated enforceable authorities.

**April 2004 Add MM for Forestry Rationale**

*NOAA and EPA have determined that Oregon has not fully satisfied the condition requiring the State to identify and begin applying additional management measures for forestry in several areas critical to water quality protection. NOAA and EPA agree that Oregon has processes in place to identify additional management measures for forestry through review procedures such as that of the Independent Multidisciplinary Science Team and the sufficiency analyses called for in the MOU between ODF and DEQ. However, Oregon has not yet begun to sufficiently apply additional management measures that address our water quality concerns. This determination is consistent with the determination we made in January 2003.*

*In the 1998 rationale for findings and conditions, EPA and NOAA identified areas under the Forest Practices Act and Administrative Rules that should be strengthened to attain water quality standards and fully support beneficial uses: "These areas include protection of medium, small, and non-fish bearing streams, including intermittent streams; protection of areas at high risk for landslides; the ability of forest practices to address cumulative impacts of forestry activities; road density and maintenance, particularly on so-called 'legacy' roads; and the adequacy of stream buffers for application of certain chemicals."*

*The latter concern about the adequacy of stream buffers for application of certain chemicals is being addressed by processes that may result in additional buffer protection requirements beyond those on existing labels in order to protect endangered species.*

*NOAA and EPA are pleased to note that more protective forestry rules to address landslides and road construction have been formulated and passed. Amendments to the Oregon Administrative Rules (OAR 629-623-0000 to 08000) require identification of landslide hazard areas in stewardship plans, and road construction and maintenance. Timber harvest and road construction are not allowed on sites with "substantial downslope public safety risk" and harvesting activities that occur on other high landslide hazard areas must use specific practices to prevent ground disturbance. However, hazards are defined only as they relate to risk for losses of life and property, not water quality. NOAA and EPA would like Oregon to explain how these new amendments protect surface water quality, if at all. There have also been other improvements in general road maintenance to provide a better drainage network for water quality purposes (OAR 629-625-0330) and to establish wet weather use requirements/restrictions (OAR 629-625-0700).*

*In March of 2003, Oregon submitted an update and additional information showing how the Oregon Department of Forestry (ODF) uses recommendations from the Forest Practices Advisory Committee (FPAC), the Independent Multidisciplinary Science Team (IMST), the ODF/DEQ Sufficiency Analysis, and the Eastside Riparian Functions Advisory Committee (ERFAC) to develop rule concepts for riparian areas. The submission included a Forest Practices Process Chart, some detail on recommendations, a sample of minutes from a Board of Forestry meeting, and an anticipated schedule for reviewing riparian concepts and rule making. At that time, it was anticipated that draft rules would be presented to the Board in June 2003 and that rules would be adopted in October 2003.*

*NOAA and EPA understand that this process is continuing but has fallen behind schedule. At this point, ODF and the Board of Forestry are considering eighteen draft rule concepts for water protection and riparian functions. They are deciding whether the action for each concept will be to draft a rule or to pursue a non-regulatory pathway. Once those decisions are made, the resultant package of draft rules will undergo an analysis of economic impact and examination of alternatives before being put out for public review. At present, three of the eighteen concepts are moving forward into the draft rule package and four of the eighteen concepts are being directed into non-regulatory pathways, leaving eleven still to be decided upon.*

*The rule concepts that relate most directly to the expressed concerns of the Coastal Nonpoint Program are the following:*

| ***Rule Concept*** | ***Proposed Action*** |
|---|---|
| *2. Use Type F prescriptions for large and medium Type N streams* | *Undecided* |
| *3. Riparian management areas (RMA) above fish barriers* | *Undecided* |
| *4. Wood from debris flows and landslides* | *Draft Rule* |
| *8. Basal area target increase for medium and small Type Fs* | *Draft Rule* |
| *9. 60% Basal area cap* | *Non-regulatory* |
| *10. No harvest within ½ RMA* | *Non-regulatory* |
| *11. Retain largest trees within the RMA* | *Non-regulatory* |
| *12. Small Type N streams* | *Undecided* |

*Since the BOF's decision-making and rule-making processes for these riparian rule concepts is still on-going, it is premature for EPA and NOAA to make a decision as to whether or not Oregon's approach will adequately address the riparian aspect of the condition. EPA and NOAA will not be able to make a conclusive decision until the new riparian rules have been adopted and/or voluntary, incentive-based programs have been developed that will enable water quality standards and TMDL shade targets to be achieved.*

*NOAA and EPA encourage the State to take progressive action on these riparian concepts. Recent analyses and studies such as the IMST review, the ODF /DEQ Shade Study funded by CWA Section 319, and TMDLs developed for several coastal watersheds demonstrate that the riparian management practices carried out under the current rules are not adequate to meet shade targets or water quality standards. Riparian rule concepts 2, 3, 8 and 10 have the greatest potential to*

*significantly improve upon management practices designed to achieve water quality standards, including temperature and shade targets. Therefore, we particularly encourage ODF to make progress in these areas.*

*In Executive Order No. EO 99-01, the Governor charged that:*

> *"(3)(c) The Oregon Board of Forestry will determine, with the assistance of an advisory committee, to what extent changes to forest practices are needed to meet state water quality standards and to protect and restore salmonids. . . . The Board may determine that the most effective means of achieving any necessary changes to forest practices is through regulatory changes, statutory changes or through other programs including programs to create incentives for forest landowners."*

*Therefore, as ODF and the Board of Forestry work to improve the riparian management program, they should ensure that the combination of rule changes and voluntary programs proposed will enable water quality standards to be achieved.*

*If the State wishes to pursue voluntary programs to address these additional management measures, the State would need to submit a legal opinion as required by the 1998 Administrative Changes Memo to demonstrate is has enforceable mechanisms and policies to back-up their voluntary approach. In addition, Oregon would have to provide: (1) a complete description of the voluntary or incentive-based programs, including the methods for tracking and evaluating those programs it will use to encourage implementation of the management measures; and (2) a description of the mechanism or process that links the implementing agency with the enforcement agency and a commitment to use the existing enforcement authorities where necessary.*

*Although the State is making progress to address many of the IMST recommendations and concerns NOAA and EPA raised in the conditional findings, very little progress has been made in addressing cumulative effects from forestry (IMST Recommendation #2). Cumulative impacts from forestry activities, including increased road density, continue to be an important concern that should be addressed. For example, a 1995 temperature study on the Olympic Peninsula concluded that stream temperatures cannot be successfully managed at the reach level unless harvest activities are evaluated on a basin-wide scale. NOAA and EPA recognize that implementing a program that considers the cumulative effects of forestry will require a significant policy change and may take several years to complete. NOAA and EPA strongly encourage Oregon to make progress on this over the next few years. The State should demonstrate a commitment to implement Recommendation #2 or similar program over time by developing a schedule and plan to do so.*

*Finally, EPA and NOAA continue to support and encourage the voluntary programs under the Oregon Plan for Salmon and Watersheds that address water quality, including projects for road surveys and improvement, fish passage, large wood placement, monitoring, and education. For example, Road Erosion and Risk Projects identify roads that present risks for salmon recovery, particularly targeting "legacy" roads, and establish priorities for reducing these road-related*

*risks. All roads on land belonging to members of Oregon's Forestry Industry Council are assessed through this program as well as some of the industrial and non-industrial forest lands. The State estimates that the forestry industry spends $13 million per year on road improvement projects in the coastal zone. In addition, the State Forests Program spent over $25 million between 1997-1999 on road restoration projects and are proposing to spend an additional $2.5 million over the next two years. These projects are valuable and worth tracking and reporting as part of program implementation. However, the information Oregon has provided on the amount of money that is directed toward these efforts is outdated. In order to help us evaluate the value of the voluntary programs, we would appreciate answers to the following questions: What percentage of forest land in the 6217 management area is included in the Road Erosion and Risk Projects Program? How much has been spent on road improvement, road restoration, and road decommissioning projects in the 6217 boundary between 2000 and 2003? How much is anticipated in the next few years?*

*NOAA and EPA urge the State to move forward expeditiously to implement these recommended additional management measures, either through application of basin specific rules, changes to the FPA and OARs or by implementing voluntary, incentive-based programs backed by enforceable authorities.*

## IX. MONITORING

**CONDITION:** Within one year, Oregon will include in its program a plan that enables the State to assess over time the extent to which implementation of management measures is reducing pollution loads and improving water quality.

**June 25, 2008 FINDING:** Oregon has satisfied this condition.

**RATIONALE:** Oregon has developed a general monitoring plan that enables the State to assess over time the extent to which the management measures are being implemented and improving water quality. The monitoring program has established a statewide rotating schedule for monitoring set reference sites and randomly selected sites for compliance with the State's water quality standards. Every year, the State samples 20% of both their reference and random sites for various parameters, including temperature, sediment, dissolved oxygen, biological criteria, pH, stream fertility, and some toxics. Depending upon the parameter sampled, Oregon has 50 or 75 established reference sites within the 6217 management area and an additional 50 or 150 random sites across the rest of the State. In addition, the State also conducts an estuarine monitoring program that specifically samples for temperature, salinity and bacteria in shellfishing areas. The State uses this monitoring information to develop 305(b) reports and TMDL Watershed Management Plans which may require additional management measures.

Senate Bill 945 also directs the Oregon Watershed Enhancement Board (OWEB) to develop and implement a statewide Monitoring Program in coordination with state natural resource agencies for activities conducted under the Oregon Plan for Salmon and Watersheds, many of which are

relevant to the (g) measures. *A Monitoring Strategy for the Oregon Plan for Salmon and Watersheds* describes the framework for the OWEB monitoring strategy. The Strategy includes assessing general status and trends for physical habitat and biotic conditions in selected sub-watersheds; documenting implementation of OWEB restoration projects; and evaluating the local effectiveness of restoration efforts by monitoring representative samples of specific project, activity and program types. Finally, the State will integrate information from multiple sources to produce data products and reports that assess restoration efforts and evaluate progress towards recovery goals.

In addition to these general monitoring programs, each TMDL Implementation Plan is also required to include a monitoring and assessment component to describe how the designated management agencies will routinely evaluate the effectiveness of the implementation plan and to determine if additional actions are needed to sufficiently improved impaired water bodies.

Forestry is the dominant land use within the 6217 boundary. Therefore, to better assess the implementation and effectiveness of the Forestry Practices Act (FPA), which is consistent with the (g) guidance, the Oregon Department of Forestry (ODF) carries out the Forest Practices Monitoring Program. The ODF's monitoring program described in the December 2002 *Forest Practices Monitoring Program Strategic Plan*, involves both BMP implementation and effectiveness monitoring. All monitoring data is available in a central database as part of the State of Forests Integrated Information System and ODF analyzes and reports on the information collected annually. The ODF has already released several monitoring studies including the effectiveness of forest road sediment and drainage control practices, harvest effects on riparian areas, effectiveness of the FPA at obtaining temperature standards, and a comprehensive study on BMP implementation. Based on the monitoring conducted, each report recommends changes to the FPA to the Board of Forestry in order to improve the forestry program.

NOAA and EPA encourage Oregon to continue to implement and improve upon the various monitoring programs that comprise their Coastal Nonpoint Control Program monitoring network. The State should continue to dedicate sufficient staff and resources to carry out the monitoring programs. In addition, Oregon should strongly consider developing a tracking/assessment program similar to the Forest Practices Monitoring Program for other select measures that address significant land uses within the 6217 boundary, such as key urban or agricultural measures. The ODF should also ensure that they continue to conduct comprehensive BMP implementation studies on a regular basis and work towards implementing recommendations from past monitoring studies in a timely manner.

## X. STRATEGY AND EVALUATION FOR BACKUP AUTHORITIES

Within two years, Oregon will develop a strategy to implement the management measures for confined animal facilities exempt for the State definition of CAFOs throughout the 6217 management area. Within one year, the State will develop a strategy to implement the roads, highways, and bridges management measures throughout the 6217 management area. These

strategies will include a description and schedule for the specific steps the State will take to ensure implementation of the management measures; describe how existing or new authorities can be used to ensure implementation where voluntary efforts are unsuccessful; and identify measurable results which, if achieved, will demonstrate the State's ability to achieve implementation of the management measures using the described approach.

Oregon will also develop and apply credible survey tools to demonstrate the ability of the State's approach to achieve implementation for these management measures. The use of credible assessment techniques is necessary in order for NOAA and EPA to evaluate, at the end of the three year period described in the March 16, 1995 guidance issued by NOAA and EPA entitled Flexibility for State Coastal Nonpoint Programs, whether the State's approach has been successful or whether new, more specific authorities will be needed.

**Comment [AC1]:** Note: For whatever reason (before my time) final decision docs have never specifically addressed this Strategy and Evaluation condition. I don't think we should break precedent in OR, but need to be aware of it given NWEA's comments related to Ag.